What Will Happen – Chapter 1 – Learning a New Language

Study: No Radiation Level Safe

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WASHINGTON (AP) The preponderance of scientific evidence shows that even very low doses of radiation pose a risk of cancer or other health problems and there is no threshold below which exposure can be viewed as harmless, a panel of prominent scientists concluded Wednesday.

The finding by the National Academy of Sciences panel is viewed as critical because it is likely to significantly influence what radiation levels government agencies will allow at abandoned nuclear power plants, nuclear weapons production facilities and elsewhere.

The nuclear industry, as well as some independent scientists, has argued that there is a threshold of very low level radiation where exposure is not harmful, or possibly even beneficial. They said current risk modeling may exaggerate the health impact.

The panel, after five years of study, rejected that claim.

“The scientific research base shows that there is no threshold of exposure below which low levels of ionized radiation can be demonstrated to be harmless or beneficial,” said Richard R. Monson, the panel chairman and a professor of epidemiology at Harvard’s School of Public Health.

The committee gave support to the so-called “linear, no threshold” model that is currently the generally acceptable approach to radiation risk assessment. This approach assumes that the health risks from radiation exposure declines as the dose levels decline, but that each unit of radiation – no matter how small – still is assumed to cause cancer.

The panel, formally known as the Committee on Biological Effects of Ionizing Radiation, or BEIR, generally supported previous cancer risk estimates – the last one by an earlier BEIR group in 1990.

Contrary to assertions that risks from exposure from low-level radiation may have been overstated, the panel said “the availability of new and more extensive data has strengthened confidence in these (earlier) estimates.”

The committee examined doses of radiation of up to 100 millisievert, a measurement of accumulated radiation to an individual over a year. By comparison, a single chest X-ray accounts for 0.1 millisievert and average background radiation 3 millisievert.

The committee estimated that 1 out of 100 people would likely develop solid cancer or leukemia from an exposure of 100 millisievert of radiation over a lifetime.

The FAA recommends occupational radiation limits for commercial-aircraft crewmembers. These include a 5-year average effective dose of 20 millisieverts per year, with no more than 50 millisieverts in a single year. For a pregnant crewmember, starting when she reports her pregnancy to management, the recommended limit for the conceptus is an equivalent dose of 1 millisievert, with no more than 0.5 millisievert in any month.

Let's learn 9 different definitions (they may seem redundant):

1 Sv is equal to 100 rems. The Röentgen equivalent man or rem (symbol rem) is a unit of radiation dose. It is the product of the absorbed dose in röentgens and the biological efficiency of the radiation. The corresponding SI derived unit is the Sievert, which equals 100 rem. A millirem (abbr. mrem) is one thousandth of a rem. If you assume Q and N equal to 1, then 1 Sv ≈ 107.185 R.

Absorbed dose is a measure of the energy deposited in a medium by ionizing. It is equal to the energy deposited per unit mass of medium, and so has the unit J/kg, which is given the special name gray (Gy).

Note that the absorbed dose is not a good indicator of the likely biological effect. 1 Gy of alpha radiation would be much more biologically damaging than 1 Gy of photon radiation for example. Appropriate weighting factors can be applied reflecting the different relative biological effects to find the equivalent dose.

The risk of stochastic effects due to radiation exposure can be quantified using the effective dose, which is a weighted average of the equivalent dose to each organ depending upon its radiosensitivity.

Effective dose is a measure used in radiation protection to estimate the risk resulting from an exposure of ionizing radiation. The effective dose (H) to an individual is found by calculating a weighted average of the equivalent dose (E) to different body tissues, with the weighting factors (W) designed to reflect the different radiosensitivities of the tissues:

$H = \sum_i E_i W_i$

Effective dose is used as a measure of the likelihood of stochastic effects of radiation exposure: carcinogenesis and hereditary effects. It is not intended as a measure for acute or threshold effects of radiation exposure such as erythema, radiation sickness or death.

The unit for effective dose is the sievert (Sv).

The equivalent dose (HT) is a measure of the radiation dose to tissue where an attempt has been made to allow for the different relative biological effect of different types of ionizing radiation. Equivalent dose is therefore a less fundamental quantity than radiation

absorbed dose, but is more biologically significant. Equivalent dose has units of sieverts.

The equivalent dose should not be mistaken for dose equivalent. Dose equivalent (H) presents the absorbed dose at a specific location in tissue weighted by a distribution of quality factors (Q). These are influenced by the LET (linear energy transfer) distribution of the radiation at that site.

Equivalent dose (E) is calculated by multiplying the absorbed dose (D) with the evaluation factor. Formerly, The International Radiological Protection Commission recommended the use as the evaluation factor of the quality factor Q (that estimates the relative biological effectiveness, RBE) only. The value of Q is 1 for x-rays, gamma rays and beta particles, but higher for protons, neutrons, alpha particles, etc.

In 1990, the organization issued new recommendations. The radiation weighting factor (wR) should be used as the evaluation factor. It is calculated by multiplying the quality factor Q and the modified factor N. The modified factor has value of 1 when used for external sources of irradiation, but is defined arbitrarily by a competent authority when used for internal ones. The equivalent dose is thus calculated by the equation:

$H_{t,r} = w_R * D_{t,r}$

A gray, (symbol: Gy), is the SI unit of energy for the absorbed dose of radiation. One gray is the absorption of one joule of radiation energy by one kilogram of matter. One gray equals 100 rad, an older unit.

The Gray was defined in 1975 in honor of Louis Harold Gray (1905-1965), who used a similar concept, “that amount of neutron radiation which produces an increment of energy in unit volume of tissue equal to the increment of energy produced in unit volume of water by one Röentgen of radiation,” in 1940.

The rad is a unit of radiation dose, with symbol rad. It is superseded in the SI by the gray; the United States is the only country to still use the rad.

1 rad = 0.01 gray (Gy) = 1 cGy = 0.01 joule of energy absorbed per kilogram of tissue.

The röentgen or roentgen (symbol R) is a unit of exposure to ionizing radiation (X or gamma rays), and is named after the physicist Wilhelm Röentgen. It is the amount of radiation required to liberate positive and negative charges of one electrostatic unit of charge in 1 cm3 of air at standard temperature and pressure (STP). This corresponds to the generation of approximately 2.08×109 ion pairs.

In SI units, 1 R = 2.58×10^{-4} C/kg. A dose of 500 R in 5 hours is lethal for humans. The röentgen is an obsolete unit, superseded by the gray. In dry air, 1 Gy is approximately equal to 100 röentgens.

The röentgen was occasionally used to measure exposure to radiation in other forms than X-rays or gamma rays. To adjust for the different impact of different forms of radiation on biological matter, the “Röentgen equivalent man” or rem was also in use. Exposure in rems is equal to the exposure in röentgens multiplied by the Q value, a constant describing the type of radiation. The rem is now superseded by the sievert.

Natural background exposure varies widely; from 0.17 µR/hr in some regions to as high as 11 µR/hr in others (1.5 to 100 mSv/a), with urban areas typically having higher exposure rates than rural ones. The world’s average individual lifetime dose due to natural background radiation is about 16 R (160 mSv; 0.3 µR/hr if you assume an average life expectancy of 60 years).

The Röentgen equivalent man or rem (symbol rem) is a unit of radiation dose. It is the product of the absorbed dose in röentgens and the biological efficiency of the radiation. The corresponding SI derived unit is the sievert, which equals 100 rem. A millirem (abbr. mrem) is one thousandth of a rem.

The strontium unit is a unit used to measure the amount of radioactivity from strontium-90; a chemical found in nuclear fallout, in a subject’s body; as the human body mistakes the substance for calcium and incorporates it into the skeleton, its presence is very common. One strontium unit is equal to one picocurie from strontium-90 per gram of calcium (37 Becquerel’s per kilogram) in the subject’s skeleton.

The United States National Academy of Sciences holds that the maximum safe measure of strontium-90 in a person is one hundred strontium units (3700 Bq/kg). The average American is estimated to have three to four strontium units.

The strontium unit was formerly known briefly as the sunshine unit, a term promoted by the United States Department of Defense until public ridicule brought about its disuse.

It could be important, have you seen the paper lately? The Chinese are offering to buy Unocal and they sort of threatened the United States government not to interfere. Never mind we sold them part of IBM already; they need an oil company so they have the oil they need to invade Taiwan. President George W. Bush has made it exceedingly clear what will happen if they try. Chevron bought Union Oil. You might need to know some or all of those 9 definitions I gave you. I’m old, sick and tired and if the Chinese off me, not many people will care, just another dead old fart, they’ll say. Maybe my friends and I will get lucky and the Chinese will target the LA suburb my friends and I live in.

Bush isn’t half bad, for a member of the moral majority. He is a little confused on Social Security and is bogged down in Congress arguing over appointments. The Democrats only want Communists in office and the Republicans only want Fascists. And everybody is holding their collective breaths about what will happen if the Chief Justice of the Supreme Court dies, he has cancer. There was an article in the paper about all of the vacation plans people were changing for the big fight. It was an article on judicial activism.

And just when you don't have it figured out, Sandra Day O'Connor resigns. Maybe Bush will try and pack the Court. It would only take 2 conservative judges.

What we ought to do is sell the Chinese Wal-Mart and then talk everyone into shopping at Target and K-mart. Martha Stewart needs the money. The New York Times had a very interesting article on the subject of the 1st Amendment and the Freedom of Religion. This has been a controversial subject since the beginning. The controversy got rolling in the 1840's when Ireland had a potato famine and all of those Catholics came to the US. I guess most Americans didn't know that Catholics were Christians too. They just weren't Protestant Christians. And, nobody has liked the Jews since William Shakespeare wrote 'The Merchant of Venice', maybe before. You might not want to read the NYT article, it was written by a liberal Jew. I think he's right, but I found that he and I agreed on more things than we disagreed on. I sent the link to FT, but he was probably offended.

Derek wants us to move to Mountain Home and Sharon and I want to move to Sedona. Among other things, we left Iowa because of the weather, hot and humid in the summer and icy cold in the winter. I've always liked the desert. It might be hotter than Hell, but it is a dry heat.

NEW YORK Jul 1, 2005 – North Korea told the United States that it must withdraw its description of the communist nation as an "outpost of tyranny" and treat Pyongyang as a friend if it wants nuclear talks to resume, a senior North Korean official said Friday. North Korea's director general of North American affairs, Li Gun, told reporters after a two-day conference on northeast Asian security that the next step is up to the Americans.

Speaking in English, Li said, "We told them (the US) to just withdraw the words 'outpost of tyranny.' We demand it."

Kiss Our Butt, North Korea. You tell them, George. Do the B-2's in Guam and Diego Garcia have any B-83 bombs? Give some of them to North Korea and Iran, 16 apiece would be enough. Use the B-2 bombers to deliver them but since we don't have landing rights, you'll have to drop them off. Just be sure they're armed when you drop them. Iraq is west of Iran, so check the wind first and make sure it is out of the west. And be sure to pull the troops out of Afghanistan, it's on the eastern border of Iran. Japan will support us – Korea is giving them trouble. Who knows, we might get Osama with the fallout?

But we won't so that means that China won't attack us until we object to their invasion of Taiwan.

What Will Happen – Chapter 2 – Why You Shouldn't Bother

The rad is a unit of radiation dose, with symbol rad; the United States still uses the rad. The available radiation meters are mostly the Civil Defense meters rebuilt and recalibrated by Radmeters4U of Gonzales, Texas. IMHO a person would be well off to acquire a CD V-777A containing: one CD V-700 GM detector, one CD V-715 ion chamber, one CD V-717 ion chamber, six CD V-742 pocket dosimeters and one CD V-750 charger-reader. To this I would add: Potassium Iodide or Potassium Iodate and at least one CD V-138, 200mR dosimeter, but preferably 6. You could probably figure on spending as much as $1,500-$2,000 once you put together a complete setup as I'd recommend.

http://www.orau.org/ptp/collection/civildefense/civildefense.htm

In one of my stories, I suggested that the background radiation didn't fall much below 50mR. Here's a 7/10 table:

--Hours--Level-----Percent----Lapsed Time-----
--------7---0.1----------10%----------7 hours
------49---0.01----------1%-------2 days, 7 hours
----343---0.001---------0.1%----14 days, 7 hours
--2,401---0.0001------0.01%--100 days, 1 hours
16,807---0.00001---0.001%--700 days, 7 hours

Had to put the dashes in to maintain the spacing. Let's say your peak radiation level is 3,000R/hr. At 100 days, the level would 300mR/hr. In order to reach a 'safe level' permitting you to be outside 24/7, you couldn't exceed a level of 104mR/hr per hour, preferably half of that. So, 0.104R * 24 = 2.496 * 120 = 299.52R in 120 days (4 months). Theoretically, you shouldn't have any ill health effects at that level or below. A beginning level of 3,000R/hr isn't likely unless you were pretty close to ground zero and in a stout underground shelter.

So, let's say the peak level was 500R/hr. If you have a CD V-717, you'll know 7 hours after the level starts falling, because you can multiply the 7-hour level by 10 to get the peak level. If a totally safe level is 50mR/hr, you will reach that in 100 days. You should reach 100mR/hr in about 50 days. Can't stay in the shelter for 3½ months? You aren't prepared, partner. It's theoretical anyway because if the outside level is over 500R/hr, it may have started to fall some time well before the needle on the CD V-717 came off the 500R/hr level. However, our goal is 50mR/hr and we can start counting from when the needle falls below 500R.

Therapeutic actions to reduce internal dose following the intake of radioactive material typically require medical administration of an agent to block, chelate, dilute, or purge the body of the radioactivity. Blocking agents are used to prevent gastrointestinal absorption through ion exchange processes (e.g., Prussian blue for cesium blockage) or adsorption (e.g., antacids or alginates for strontium). These may be coupled with stomach lavage,

emetics, and purgatives or laxatives to accelerate removal or passage through the GI tract. Chelating agents, e.g., DTPA for plutonium or americium, are usually administered by intravenous injection and bind with ionic forms in the blood. They are then rapidly excreted in urine. Dilution of radioactivity can be accomplished by administering a relatively large dose of the stable form of the element, thereby reducing the likelihood of retention of the radioactive form (e.g., administration of stable potassium iodide in response to exposure to ^{131}I). Acceleration of normal metabolism to speed removal of radioactivity can be effective (e.g., diuretics to accelerate body water turnover to eliminate tritium). For extreme cases of insoluble particle inhalation, lung lavage may be an effective therapy. Details concerning the effective methods of treatment and therapy for various radionuclide intakes can be found in the Guidebook for the Treatment of Accidental Internal Radionuclide Contamination of Workers edited by Gerber & Thomas (Bhattacharyya et al. 1992), NCRP Report No. 65 (NCRP 1980), IAEA Safety Series No. 47 (IAEA 1978b), IAEA Technical Report Series No. 184 (IAEA 1978a), and ICRP Publication 28 (ICRP 1978a). These documents should be immediately available to health physics and medical personnel.

That was an excerpt from a DOE publication, Std 1121-98. It talks about lifetime dosages of radiation, etc. for nuclear industry workers. I figure we'd get a lifetime dose every day after a nuclear war. After all, I'm suggesting that 50mR per hour, 1.2R per day won't kill you. Nobody really knows, do they? Would you want to live in a world where you were exposed to 50mR per hour, 24 hours a day? You might not have a choice; did that ever occur to you?

North Korea wants an apology, China says for us to stay out of their business and the new leaders of Iran are the buttholes that took our people hostage in the Embassy. Osama bin Laden has been pretty quiet lately, what's going through his mind? Even Russia is being a little more assertive and doing joint maneuvers with China, selling them Backfire C's (Tu-22M3) and who knows what else. China is pedal to the metal building up their military. (Osama bin Laden is now totally quiet for eternity.)

The US Defense Department stated in September 1991 that production had officially ceased with a total of approximately 90 missiles deployed. A total of 46 silo-based RT-23UTTh missiles located in Ukraine were phased out and dismantled in compliance with the provisions of the START-I treaty. They were denuclearized and their warheads have since been transferred to Russia. By 1994 most of the rail-mobile systems remained in garrison due to lack of funding. By April 1997 10 silo-based and 36 railway based RT23-UTTh missiles were still deployed on Russian territory. Following Russian ratification of the START-2 treaty in early 2000, all RT-23 UTTh (Scalpel – Soviet Peacekeeper) missiles became subject to dismantling.

With the breakup of the Soviet Union in 1991, most design and production facilities for the SS-24 belonged to Ukraine. Ukraine had no interest in continuing to produce these ICBMs, and the production line was closed in 1995.

It has been suggested that these rail-mobile land-based missiles, which have been parked in their garrisons, may be placed back on patrol in response to American missile defense and associated arms control initiatives though this has never been officially confirmed.

In August 2002 the Strategic Missile Forces chief, Colonel General Nikolai Solovtsov, announced that the military will keep one division of the train-mounted missiles. One division includes up to five trains, each carrying three missiles, and each missile carries 10 warheads. Russia was supposed to scrap all its RT-23 missiles under START II, but Russia withdrew from the treaty in June after the US abrogated the Anti-Ballistic Missile Treaty.

As of 01 April 2005 Kommersant reported that the Strategic Missile Force of Russia had 496 ICBMs, including 226 silo-launched (86 heavy missiles R-36MUTTH (Satan) and R-36M2 Voevoda (Satan mod 5), 10 medium missiles UR-100NUTTH, and 40 light missiles RS-12M2 (Topol-M) and 270 mobile ground-launched missiles RS-12M Topol. By 2010, the Force may have no more than 313 ICBMs, including 154 silo-launched (40 R-36M2 Voevoda, 50 UR-100NUTTH (Stiletto), and 64 RS-12M2 (Topol M), and 159 mobile ground-launched missiles (144 RS-12M (Topol) and 15 RS-12M1 (Topol M). The 270 mobile ground-launched solid-fuel missiles RS-12M Topol (SS-25 Sickle in NATO classification) may be slashed to 144 in five years. At the same time, 89 new Topol-M missiles (64 RS-12M2 and 15 RS-12M1) are to be put on combat duty, but this is nearly two times fewer than the number of ICBMs to be slashed (136). The number of warheads on the ICBMs will be reduced from 1,770 to 923. [Upon close inspection these numbers don't exactly add up and are internally inconsistent, based on standard warhead loading assumptions]

Most of those Russian nukes have ½ Mt warheads. Some are MIRV'd or can be. So if the Russians pulled out of START when the US pulled out of the ABM Treaty, where does that leave us? Maybe the Russians sold the Chine those bombers so they had the money to modify their ICBM fleet? They also sold them some Flankers, Su-27's. The Su-30 is just an upgraded Su-27. The deal with India fell through over the issue of Akula attack submarines. On 20 January 2004 India finalized the purchase of the Russian aircraft carrier Admiral Gorshkov after over a decade of negotiations. But Russian Defense Minister Sergei Ivanov and Indian Defense Minister George Fernandes did not reach agreement on other weapons, such as the Tu-22 Backfire bombers or Akula-class nuclear submarines.

If it were I, I'd wait to attack Taiwan until January 21, 2009. The country will be tired of a Republican President and the new Democrat President will be so busy bringing our troops home the President and the Democrats in Congress will probably just tell China to take Taiwan, it's a small island anyway (32,260 km²). Guam is 549 km² for comparison. During the 1960's and 1970's, Taiwan began to develop a prosperous and dynamic economy, becoming one of the East Asian Tigers while maintaining an authoritarian one party government. Because of the Cold War, most Western nations as well as the United Nations regarded the Republic of China government on Taiwan as the sole legiti-

mate government of China until the 1970's when most nations began switching recognition to the People's Republic of China.

The political status of Taiwan is controversial over questions about whether Taiwan should remain the Republic of China, become part of the People's Republic of China, or become an independent Republic of Taiwan. Currently, it is a de facto independent state with a government based on representative democracy. The official name of the state is the Republic of China. Different groups have different concepts of what the current formal political situation is.

In addition, it can be confusing because of the different parties and the effort by many groups to deal with the controversy through a policy of deliberate ambiguity. The political solution that is accepted by most of the current groups is the status quo: that is, to leave Taiwan's status the way that it is as a de facto independent state without making a formal declaration of independence. What a formal declaration of independence would consist of is confusing given the fact that the People's Republic of China has never controlled Taiwan since its founding. The status quo is accepted in large part because it does not define the legal status or future status of Taiwan, leaving each group to interpret the situation in a way that is politically acceptable to its members. At the same time, a policy of status quo has been criticized as being dangerous precisely because different sides have different interpretations of what the status quo is, leading to the possibility of war through brinksmanship or miscalculation.

The United States, Canada, the United Kingdom and Japan recognize that there is one China and that the People's Republic of China is the sole legitimate government of China. However, the US and Japan acknowledge rather than recognize the PRC position that Taiwan is part of China. In the case of Canada and the UK, the bilateral written agreement stated that the two respective parties take note of Beijing's position, but the word support was never used. Although the Chinese media claims that the United States opposes Taiwanese independence, the United States currently does not support (contrast that to the word oppose) either reunification or independence. The US does support both sides of the Taiwan Strait to resolve their differences peacefully. All this ambiguity has resulted in the United States constantly walking on a diplomatic tightrope with regards to the China/Taiwan issue.

Recently in 2003, Taiwan made a purchase of four missile destroyers – the former USS Kidd and three sister ships, and is expressing a strong interest in the Arleigh Burke class. But with the growth of the PRC navy and air force, some doubt that Taiwan could withstand a determined invasion from mainland China in the future. This also leads to a view that Taiwanese independence, if it is to be implemented, should be attempted as early as possible while Taiwan still had the capacity for an all-out military conflict. Over the last three decades, estimates of how long Taiwan can withstand a full scale invasion from China without any outside help has decreased from three months to little over three weeks.

Numerous reports issued by the PRC, the ROC, and the United States militaries make wildly contradictory statements about the possible defense of Taiwan.

Naturally, the possible war is not being planned in a vacuum. The United States in 1979 passed the *Taiwan Relations Act*, a law generally interpreted as mandating US defense of Taiwan in the event of an attack from the Chinese Mainland. The United States maintains the world's largest permanent fleet in the Pacific Region near Taiwan. The Seventh Fleet, operating primarily out of various bases in Japan, is a powerful naval contingent built upon the world's only forward-deployed aircraft carrier USS Kitty Hawk. Although the stated purpose of the fleet is not Taiwanese defense, it is safely assumed from past actions that that is one of the reasons why the fleet is stationed in those waters. The 1960 Presidential election included charges by Richard Nixon that John Kennedy would never use nuclear weapons in defense of Taiwan.

I can imagine what would happen if the Chinese attacked Taiwan while the Republicans were still in power would be an immediate response involving the Pacific Fleet. The government would go to a threat level of orange or red and DEFCON-3. It would be a modern version of the Cuban Missile Crisis. The Chinese aren't the Russians. The North Koreans might make a preemptive strike against Japan and try and take out the American Seventh Fleet. It kind of gets a person to wondering what it would be like.

The distance from Agana, Guam, United States to Taipei, Taiwan is 1702 miles (2740 km) (1479 nautical miles). Andersen Air Force Base (AFB), Guam is located on the north end of Guam, approximately 15 miles from the capital, Agana. Andersen AFB is in the village of Yigo, pronounced "Geego." There are plenty of recreational and travel opportunities which make Andersen a popular tour among the adventurous. Most tours are 24 months (accompanied) and 15 months (unaccompanied). The 7th AEW was activated in late February or early March 2003 at Andersen Air Force Base just prior to the arrival to 12 B-1Bs and 12 B-52s that were deployed to Guam from the US in an effort to deter North Korea. The rapid response deployment to the Pacific region made history as the largest bomber deployment since the Vietnam era and the largest B-1 deployment ever. Four B-2 shelters had been constructed on Diego Garcia. Andersen already has hangars the B-2 could use.

HAEGUMGANG, North Korea – From the first light of morning, soldiers squat in the fields, many of them stripped down to their T-shirts. They are joined by women with babies strapped to their backs, children who look like they ought to be in school and senior citizens with white kerchiefs wrapped around their heads to protect them from the sun.

It is the height of the planting season in North Korea and the regime has mobilized millions of people to make the most of the moment. Even office workers from the city are spending their weekends in the countryside planting rice and other crops.

The mass mobilization has been the custom every year in North Korea for decades – it is usually as much a way of inculcating collectivist values as getting out the crops.

But this year, it is larger than in the past and has taken on particular urgency as fears grow that North Korea could be facing a famine as bad as the one that killed about 2 million people in the mid-1990s.

Last year's harvest did not live up to expectations and this year's is supposed be especially meager because of an abnormally cool spring and delays in humanitarian shipments of fertilizer from South Korea.

"You can see that people will be going hungry," said Kang Jong Man, a South Korean agriculture and fisheries official who was visiting the pocket of North Korea just south of Mt. Kumgang that is open to tourists.

Aside from the poor weather, North Korea's food problems appear to have increased as a result of the unfavorable political climate. The regime's pursuit of nuclear weapons has not ingratiated it with the international community, and humanitarian aid has dropped steeply.

Even with Washington's announcement Wednesday that the US would donate 50,000 tons of food this year, the United Nations World Food Program says it might have to cut off 80% of its 6.5 million aid recipients in North Korea.

South Korea, angry about the North's withdrawal from six-nation talks on the nuclear issue, held off on sending fertilizer until May.

Although this flat, temperate region near the demilitarized zone is better suited for farming than the country's more mountainous regions, the crop is patently dismal to the experienced eye.

As Kang looks out from a bus at what is supposed to be the country's best farmland, he shakes his head with disapproval and enumerates the shortcomings.

The rice paddies are thin and uneven. Potato plants are pale and stunted. The fields are not properly graded. Barley still on the stalks should have been harvested weeks ago so that the same fields could be used for rice.

There are hardly any tractors in sight, only oxen – and even they appear too small and weak to properly till the land.

People won't go to war just because they're starving, will they?

What Will Happen – Chapter 3 – It's Inevitable

Because politicians run the country instead of the soldiers who have to fight the wars we'll always have wars. The President could learn a thing or two from Lt. General Hal Moore. Somehow I don't think they'll name a tank after General Westmoreland. Abrams was known as an aggressive and successful armor commander. General George Patton said of him, "I'm supposed to be the best tank commander in the Army, but I have one peer: Abe Abrams. He's the world champion." His unit was frequently the spearhead of the Third Army during WW II. Abrams was one of the leaders in the relief effort which broke up the German entrenchments surrounding Bastogne and the 101st Airborne Division during the Battle of the Bulge. He was noted for his concern for soldiers, his emphasis on combat readiness, and his insistence on personal integrity.

A quarter century later, having replaced Gen. William Westmoreland as MAC-V (Military Assistance Command-Vietnam) commander in Saigon, he supervised the process of preparing the South Vietnamese government to take over the war while American forces withdrew. Abrams's reputation for competence and uncompromising integrity was intact when he returned to the US in 1972 ("Abe never talks about ethics", said a colleague quoted here, "he just examples it"). Appointed Army chief of staff, Abrams now faced the greatest challenge of his career: reforming the demoralized Army.

They didn't name a tank after Hal Moore, but they made him an honorary Sergeant First Class (E-7). Given the choice, I've have gone with the honorary rank. Abrams died in 1974, but as far as I know General Moore is still alive.

WARSAW – The Poles say, not without a certain pride, that they are the only ones ever to occupy the Kremlin. That was in the early 17th century, almost 200 years before Napoleon and 300 before Hitler failed in their attempts to do so.

In Moscow not long ago, the national day celebration was switched from Nov. 7, commemorating the Bolshevik Revolution, to Nov. 4, when the Russians rid the Kremlin of the hated Poles.

Clearly, the present bad state of relations between Russia and Poland has plenty of historical precedents. Still, relations between the nations are as bad as they have been since the collapse of the Soviet bloc in 1989.

An exchange during a recent visit to Warsaw by Gleb Pawlowski, an adviser to President Vladimir V. Putin of Russia, reported by the Polish newspaper Gazeta Wryborcza, indicated the nastiness of the mood in both countries.

"Poles talk about Russians the way anti-Semites talk about Jews," Mr. Pawlowski said. Poland's foreign minister, Adam Daniel Rotfeld, replied, "You are looking for an enemy and you find it in Poland."

In the past two weeks, two small planes have been stolen and taken for joy rides.

In neither case was the crime a national security threat, but some analysts note that in this post-9/11 era the thieves could have easily been Al Qaeda operatives and not teenagers out for a thrill.

That has again raised the question of whether enough is being done to secure the more than 19,000 small airports scattered across the nation. At the same time, the incidents also put into stark relief two challenges the nation faces as it tries to secure itself against another terrorist attack more than three years after 9/11.

Soon after 9/11, investigators uncovered a plan to use a small plane packed with explosives to attack the US Embassy in Pakistan. Mohammad Atta, one of the 9/11 hijackers, had applied for a loan to buy a crop duster. And Zacarias Massouwi, the alleged 20th hijacker, had a crop-dusting manual with him when he was arrested. “I don’t think these guys were interested in farming,” says Professor Thomas.

China is building its military forces faster than US intelligence and military analysts expected, prompting fears that Beijing will attack Taiwan in the next two years, according to Pentagon officials. US defense and intelligence officials say all the signs point in one troubling direction: Beijing then will be forced to go to war with the United States, which has vowed to defend Taiwan against a Chinese attack.

China’s military buildup includes an array of new high-technology weapons, such as warships, submarines, missiles and a maneuverable warhead designed to defeat US missile defenses. Recent intelligence reports also show that China has stepped up military exercises involving amphibious assaults, viewed as another sign that it is preparing for an attack on Taiwan. For Pentagon officials, alarm bells have been going off for the past two years as China’s military began rapidly building and buying new troop- and weapon-carrying ships and submarines.

The danger of Chinese technology acquisition is that if the United States were called on to fight a war with China over the Republic of China (Taiwan), US forces could find themselves battling a US-equipped enemy. “I would hate for my grandson to be killed with US technology” in a war over Taiwan, senior FBI counterintelligence official Tim Bereznay told a conference earlier this year.

Some people seem to think that since the Olympics are being hosted in Beijing during 2008, the Chinese might hold off. They may be right. Then the Chinese would have everyone way off base and might have some countries believing that people who think they would attack Taiwan are crazy. Plus, if they wait until 2009, the US will probably have a Democrat as President. But what if someone like John McCain became President in 2008? It looked like it was going to happen, they might attack anyway.

The denser and thicker the barrier substance, the better its shielding properties. Where every 3.6” of earth cuts the incoming gamma radiation in half, thus doubling the PF, it would only take 2.4” of concrete because it is even denser. Of course, earth is cheaper, but where concrete had been used in the construction of a shelter it’ll be providing even

additional barrier protection. Also, the tenth-value thickness, in inches, for steel is 3.3; for concrete, 11; for earth, 16; for water, 24; for wood, 38. That means that where you have those thicknesses you'll have only $^{1}\!/_{10}{}^{th}$ as much gamma radiation pass through with that barrier material. It should be noted that various sources give different values of halving and tenth-value thicknesses.

Dr. Art Robinson, Oregon Institute of Science and Medicine: "Each American family should have as much emergency protection as its motivation and resources permit. A national shelter system with full chemical, biological, and nuclear protection - of 200 psi (permitting survival of ground-burst nuclear weapons within a mile) - could be built during a national program for about $500 per person. Instead, our government will doubtless just continue to raise the level of risk by spending this money instead on foreign adventures. Some families have provided this level of protection for themselves. The cost, on a one family basis is much higher. Since few families do this, I advocate the mini-shelter idea (the shelters you now offer). It gives good nuclear protection at a price and inconvenience many more families will pay. It does not provide chemical (not much of a risk) and biological (a high terrorist risk) protection. Families that do not install shelters should, at the very least, educate themselves about expedient measures by reading Nuclear War Survival Skills and obtaining a good radiation meter."

The large tanks (8'×28') are designed for a maximum of 30 occupants to provide blast protection up to 200 psi and buried 8' deep will ensure a Protection Factor (PF) well in excess of 10,000. Many have been constructed out of cleaned out old fuel tanks. A larger 10,000-gallon tank, for instance, could sleep 40 people at one time. Cost today with simply handing the plans to a local fabricator would run around $8,000.00, double that with the top of the line chem/bio/nuke ventilation, lighting and other support systems to fully outfit it for long term use.

Another popular design by the Oregon Institute of Science and Medicine is their proven Mini-Blast Shelter. This design fills the void for a smaller and cheaper family blast and fallout protection shelter. It is rated at 50 psi and provides well in excess of 1000 PF when buried with three feet of earth cover. This shelter offers its occupants a good chance of survival of air burst explosions of most currently deployed nuclear weapons from a horizontal distance of one to two miles, and excellent fallout protection. This is the pre-built ready-to-bury completed Mini Blast & Fallout Shelter designed by the Oregon Institute of Science and Medicine listed above with the link to the free instructions for doing it yourself. Fabricated here at KI4U, Inc., utilizing galvanized corrugated steel (14 gauge rated for under road use type) of 4' diameter and 12' long with 3' high double entry/exit risers with double welded (inside & outside) 10 gauge steel plate bulkheads and 1/4" steel blast doors; with this pre-built, pickup truck delivered, shelter and less than two hours of backhoe work later it's in-place in (beneath) your backyard. $3,200.00 FOB Central Texas, call (830) 672-8734 for more information and availability. We try to keep a dozen in inventory here.

The M256A1 detection and identification kit is most often used after a chemical attack to confirm when if it is again safe enough to unmask or exit your safe room. Your M8 and

M9 may no longer be ‘spotting up’, indicating that the deposition of the nerve agent aerosol or liquid has ceased, but they cannot tell you about any lingering and residual vapors that have not yet dissipated. The M256A1 can test for these chemical agents in the vapor form. The M8 and M9 are the standard for early detection and the M256A1 would normally be used to assure the threat has fully passed. This is one of the military’s most sensitive devices for detecting Chemical Agents and detects all agents at levels below those that can kill or injure people. $240 from guess whom? Unlimited quantity if you buy at least $100 worth of radmeters.

Calculate the protection factor of a bunker with a 1’ thick roof of concrete buried under 10’ of soil. It is easily 10,000. I do believe that if I bought the shelter from radshelters4U, I’d make the entrance and exit tunnels longer. And maybe I’d pour a patio over the top of the location the shelter was buried under 10’ of dirt. 6” of concrete could make one hell of a difference. That shelter is pretty Plain Jane and does very little to filter the air; however, Radius Engineering sells the NBC Lifecell for $5,800. It includes 6 130-amp hour batteries, a 12v high-pressure air blower, HEPA, activated Carbon and Whetlerite filters, sampling port for chemical agents, air through wall inlet and outlet ducts, 12v lite, 12v CB radio with antenna, chemical agent detector kit, a 110v 30 amp battery charger and an instruction manual. The price is less than a LUWA filter and all you’d need to buy is blast valves.

I’m not going to spend the money, I’m going out and try and catch a nuke with my baseball mitt. The rest of you might want to think about spending about $12 thousand to put in a shelter and superb filtration system. Figure on $3,200 for the shelter, $5,800 for the NBC Lifecell, another $1,200 or so for the proper radiation meters and dosimeters, money for food and water and seeds. You can amortize the cost over your greatly extend lifetime. Better yet, refinance your house and deduct the interest. You may only need to make a couple of years’ worth of payments on the loan anyway.

Whetlerite was carbon that was activated and then impregnated with copper through a chemical process. Whetlerite was named after J.C. Whetzel and E. W. Fuller, the scientists instrumental in its development. Tests showed that copper-impregnated charcoal provided twice the protection of regular charcoal against phosgene (CG), triple the protection against hydrogen cyanide (AC), and ten times the protection against arsine (SA). Whetlerite was the most effective impregnated charcoal, and the United States began putting it into some canisters at the end of World War I. By World War II, whetlerite A was the standard filter material – used in an 80 percent whetlerite A and 20 percent soda-lime mixture (called the Type D mixture). By 1942, whetlerite AS was in use with added copper and silver, improving protection against SA. By 1943, chromium VI had been added to make whetlerite ASC, with even better protection against AC and cyanogen chloride (CK). This superior carbon was used until the 1980s when it was determined that whetlerite ASC was hazardous waste. Note that when used properly, it is ok. But, if whetlerite ASC was not disposed of properly, chromium VI pollution resulted. By 1993, the Army had found a suitable nonhazardous replacement – whetlerite AZC – containing zinc. This is the current filling for the protective mask canisters.

I didn't allow for gas masks or protective suits, but you have to start somewhere. The denser and thicker the barrier substance, the better its shielding properties. Where every 3.6" of earth cuts the incoming gamma radiation in half, thus doubling the PF, it would only take 2.4" of concrete because it is even denser. Of course, earth is cheaper, but where concrete had been used in the construction of a shelter it'll be providing even additional barrier protection. Also, the tenth-value thickness, in inches, for steel is 3.3; for concrete, 11; for earth, 16; for water, 24; for wood, 38. That means that where you have those thicknesses you'll have only $\frac{1}{10}^{th}$ as much gamma radiation pass through with that barrier material. Now we can calculate the protection factor of a foot of concrete and 10' of earth. 120" ÷ 16" = 7.5 so the protection factor is 107.5. A foot of concrete raises it to 108.6. 104 = 10,000. You don't even need that foot of concrete. 16" of earth = a PF of 10, 32" = a PF of 100, 48" = a PF of 1,000 and 64" = a PF of 10,000. A normal slab of concrete for a patio would double the Protection Factor.

Those 'inexpensive' shelters Shelters4U sells can be fabricated at home for about ½ the cost. And, for the same cost, you can use a bigger pipe. The large tanks (8'×28') are designed for a maximum of 30 occupants to provide blast protection up to 200 psi and buried 8' deep will ensure a Protection Factor (PF) well in excess of 10,000. Many have been constructed out of cleaned out old fuel tanks. A larger 10,000-gallon tank, for instance, could sleep 40 people at one time. Cost today with simply handing the plans to a local fabricator would run around $8,000.00, double that with the top of the line chem/bio/nuke ventilation, lighting and other support systems to fully outfit it for long term use. Corrugated pipes aren't all cylinders, either; check out the pdf file for Big R Manufacturing in Greeley, Colorado.

What would you have if you used corrugated material, maybe 8' in diameter and dug your hole 16' deep? If you mounded the dirt on top, you would have all of the protection you'd ever need, maybe a PF of 10^6 or more. The exponent tells you how many zeros there are after the 1. 10^5 equal a PF of 100,000. That would come from 16"×5 = 80" of dirt. A sphere is the strongest shape there is a cylinder the second because the force is equally distributed over the entire surface of the cylinder.

Utah Shelter Systems shelters are 8' and 10' corrugated metal pipe and they have all of the accessories. But, they run about $30,000 and more. Plus there is, I'm told, a 6-month waiting period. They say a 40' shelter could house 40 people at a cost of $250 per person. $250×40 = $10,000. I say figure $1,000 a head, $40,000. Their LUWA air filtration system goes for $5,200. The Swiss allow 5.2 ft² per person and USS allows 10 ft² per person. A standard twin bed is 38"×75" or about 19.8 ft². The other mattress sizes are full 53"×75" = 27.6 ft², queen 60"×80" = 33.3 ft², king 76"\×80" = 42.2 ft² and Cal king 72"×84" = 42 ft². Maybe you can sleep standing up, I can't. Therefore, a 40' USS shelter could comfortably hold what, 10 people maximum? USS says their blast valves can only take a single shot of overpressure of 200psi. I read a lot, you know? Everyone is trying to help, but are we listening?

What Will Happen – Chapter 4 – What If?

One other source I didn't mention that you should consider is a company in Oregon, American Safe Rooms. They seem to have what the others have and they're a bit cheaper. Don't confuse them with American Saferoom Doors.

What if the inevitable happens? What if Kim Jong-il decides he has nothing to lose? What if China invades Taiwan? Let's assume for the moment that the US won't stand still for either happening. Kim Jong Il would either nuke South Korea or Japan. For certain, he has that capacity, assuming he isn't lying about having nuclear weapons. The Chinese have at least 400 nuclear weapons. In my heart of hearts I believe what I say and it is only a matter of when, not if…

There is no way that the Chinese can take out all of the US missiles. The Chinese aren't totally stupid, you know. Somehow in my heart, I believe that if North Korea ever uses nuclear weapons, they won't care. The select few will be bunkered away before they ever start fueling their missiles. I'd further speculate that the same thing would go for the Chinese. When would it be better to attack the US, on a holiday or during the week when everyone is away from their homes and is at work and in school? September 11, 2001 was a Tuesday. February 26, 1993 was a Friday. April 19, 1995 was a Wednesday. All of the days were workdays. Got a BOB? Does everyone in your family have a BOB?

The closest thing the US has to a Civil Defense program is the Department of Homeland Security. Here's what they recommend:

Planning & Prevention

Three Key Steps that Individuals and Families Should Take to be Properly Prepared for Unexpected Emergencies

Improving our national preparedness is not just a job for the professionals - law enforcement, firefighters and others. All Americans should begin a process of learning about potential threats so we are better prepared to react during an attack.

While there is no way to predict what will happen, or what your personal circumstances will be, there are simple things you can do now to prepare yourself and your loved ones.

1) Assemble an Emergency Kit: (Hi BOB)

All of us should be able to survive comfortably on our own for at least a three-day period. That's the amount of time you may need to remain in your home until the danger from a biological, chemical or radiological attack has passed. You'll need:

• A change of clothes

• Sleeping bags

• Food and water. A gallon of water per person per day should be enough. Canned and dried foods are easy to store and prepare.

Our advice is to start now by gathering basic emergency supplies – a flashlight, a battery-powered radio, extra batteries, a first-aid kit, prescription medicines and toilet articles. Duct tape and heavy-duty plastic garbage bags can be used to seal windows and doors. Make sure all household members know where the kit is kept. You should also consider bringing a disaster supply kit to work or leaving one in your car.

2) Make a Family Communication Plan:

• Your family may not be together at home when an attack occurs. Make sure everyone knows contact numbers and how to get in touch.

• It may be wise to have everyone call an out-of-state friend or relative.

• Keep a list of emergency numbers near the phone.

• Select a “safe-room” where everyone can gather. The best choice is an interior room above ground with few windows and doors.

3) Learn More About Readiness:

Planning helps. If your family knows what to expect, they will be calmer in the aftermath of a terrorist event. For example, you should find out where to turn for instructions, such as local broadcasting networks. Local authorities will broadcast information as quickly as possible concerning the nature of the emergency and what you should do next. Be sure to keep listening for updates.

There are other ways to plan ahead. Take a first aid and CPR class so that you can provide emergency medical help. Review your insurance policies to reduce the economic impact of a potential disaster. Remember to make accommodations for elderly family members and neighbors or those with special needs. Finally, try to make arrangements for pets not allowed in public shelters.

At our house we use the PhD system of housekeeping – piled higher and deeper. Say if you don’t want to put in a shelter, how about you come to Palmdale and help me try and catch those Chinese nukes before they hit the ground? You’ll have to bring your own baseball mitt.

Given today’s war-on-terrorism rhetoric, it’s no surprise that patriotism dominates US political discussions. Some of the more controversial parts of the USA PATRIOT Act are up for renewal, and the House of Representatives, after questioning a handful of its pro-

visions, has approved the document. The debate on the merits of the act invariably has focused on the keen divide between the value of civil liberties and the imperatives of national security. Liberals worry about the Orwellian nature of the USA PATRIOT Act, while conservatives stress the necessary sacrifices in personal freedom required in the age of terrorism.

But something vital has been lost in this debate – namely, the disturbingly limited way in which many public officials define patriotism. Exactly when and how did patriotic feeling get defined in such reactive, negative terms? Since when does being patriotic require not so much a commitment to positive ideals and actions but, rather, to gestures that encourage an atmosphere of fearful watchfulness, xenophobia and the surrender of our freedoms?

Defenders of the USA PATRIOT Act insist that patriotism entails giving up some individual privacy to guard against the possibility of a terrorist attack from within or without. But patriotism also concerns a love of privacy and free speech and, not least important, a spirited willingness to defend those ideals.

Patriotism consists of multiple, positive actions on behalf of the United States – registering voters, working in an AIDS hospice, volunteering at a disadvantaged school or raising questions about the Bush administration's full-throttle militarism. Almost no one today discusses the idea of national service that would require young people of different ethnicities and economic backgrounds to come together for community projects, not military ones. The most disturbing aspect of the New Patriotism is its suggestion that dissent about the war in Iraq – or even a simple questioning of progress there – is unpatriotic.

There is always a negative side to patriotism in wartime. But in the climate created by the various "wars" in which the United States is involved today, there is no positive side – no higher task or mission is offered to people for which they can make real sacrifices. Other than spy on our neighbors and wrap oneself in the flag, our government asks little from its citizenry (it even is letting its citizen's pay less in taxes and declines to establish a military draft).

Generating a culture of nervous suspicion, the USA PATRIOT Act outlandishly distorts an American tradition of patriotic thinking and action.

That was one man's opinion. I'm a patriot but I don't like the USA PATRIOT Act because once they take away one freedom, where will they stop? Instead of worrying about those of us who can think, why doesn't the government concentrate on keeping out guys like the Pakistani Imam up in Lodi? It appears that the Mexicans are doing a better job of keeping terrorists from crossing our borders than we are. Two Iraqis who paid alien smugglers in Mexico to help them gain illegal entry to the United States were arrested yesterday by Mexican authorities in a border town near San Diego (June 29). In September, The Washington Times reported that a top al Qaeda lieutenant had met with MS-13 to seek help infiltrating the US-Mexico border. Authorities said at the time

that Adnan G. El Shukrijumah, a key al Qaeda cell leader for whom the US government has offered a $5 million reward, was spotted in July in Tegucigalpa, Honduras, with MS-13 leaders. But I must be wrong, our government is protecting us with the USA PATRI-OT Act that takes away some of your rights that they missed the last time. And what the government missed, the Supreme Court took away, like your property rights.

It occurs to me that if the Chinese attacks the US, there aren't going to be any Patriot Militias to help out the government. Well, there may be some, but the government will probably take away their guns. Now do you see why whenever I write about the stuff hitting the fan, I immediately head for Barstow? The Marine Corps Logistics Base at Barstow supplies a lot of Marines. The mission of the Logistics Base is to procure, maintain, repair and rebuild, store, and distribute supplies and equipment as assigned; to conduct such schools and training as may be directed; and to perform such tasks and functions as may be directed by the Commandant of the Marine Corps or the Commander, MCLB-Albany, GA. These services are generally provided to Marine Corps forces west of the Mississippi River and to the Far East. The counter-part to MCLB-Barstow is located in Albany and supplies installations east of the Mississippi.

In 1954 the Commanding General, Marine Corps Depot of Supplies, moved his flag from San Francisco to Barstow. Since that time, the Logistics Base has grown in stature, strength and size. On November 1, 1978, the base was re-designated to its present title to emphasize its broad support mission. The base is divided into 2 areas, Nebo and the Yermo Annex. The base headquarters as well as administrative, storage, shopping, recreational and housing facilities are located at Nebo. Nebo is a Biblical word, and at one time, on the site where the base headquarters is now located, Mormon settlers organized the Nebo Sheep Company. Then the railroad came and when a name was needed for the railhead, Nebo was chosen. Thus, when the base was activated in 1942, its railhead name was Nebo, which has been translated to mean "Little Shepherd." History tells us that at least 3 Indian tribes lived in and around the Barstow-Yermo area. The word Yermo, according to longtime residents of the town of Yermo, is an Indian word meaning "Desert Flower." (MC)3 repair facility is located at the Yermo Annex as well as the base stables, Obregon Park, and the bulk of Fleet Support Division's outdoor storage.

The Mojave Desert in California supports over ⅔ of the Marine Corps' training and lands and premier installations of the other Services. It contains unique species and cultural resources found nowhere else, and is currently the site of several new or expanded national parks and preserves. It contains critical habitat for federally listed species like the threatened desert tortoise. This same region is predicted to triple its population within the next 20 years.

The proposed West Mojave Coordinated Management Plan (WMCMP) is a comprehensive, interagency plan (32 different federal, state, and local agencies) being developed by the Bureau of Land Management (BLM) for the conservation of biological resources in the Western Mojave Region. The Plan is intended to function as a regional habitat conservation plan for meeting the requirements of the Endangered Species Act (ESA).

The Plan also serves to fully satisfy the requirements and objectives of the US Fish and Wildlife Service 1994 Desert Tortoise Recovery Plan.

The five DOD installations located in the planning area (MCAGCC, China Lake, Edwards AFB, Ft Irwin and MCLB, Barstow) represent 28 percent of the lands identified in the Plan. NREA Directorate personnel along with the other DOD installation managers reviewed the draft Plan in July/August 1995. Comments and recommendations on the Plan were presented to the BLM, US Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (CDFG). Directorate personnel have continued to provide input as the development of the draft plan has continued.

Land managers in the Mojave Desert today are faced with multiple challenges. Expanding economic development causes increased pressure on natural resources while the public demands objective and effective management strategies. Diverse groups seek to achieve conflicting goals that balance multiple demands on fragile, exhaustible resources. These goals include establishing and expanding national parks, creating wilderness areas, protecting threatened and endangered plants and animals, developing recreational areas, and expanding economic development. Given the projections for a tripling of the population in the region over the next twenty years, competition among these interests will increase resulting in fragmentation of conservation and development efforts. As a result, land managers must develop programs that evaluate, monitor, and predict system change including that caused by human impact. The task for Natural Resource Managers becomes one of fully understanding the concepts of natural system processes, integrity, and sustainability and to present sound scientific results to promote true ecosystem management.

We all know how much more important it is to preserve the turtles than train our soldiers… And you folks on the east coast know all about Albany, Georgia, right? If you didn't, you do now. Put it on your list of important places to visit when TSHTF. Albany is SE of Columbus on US 82. The Marine Corps base is SE of town. The Marine Corps Logistics Base (MCLB) Albany Georgia is located in the Southwest section of the state known as Plantation Trace. Albany is approximately 3 hours South of Atlanta. On March 1, 1952, the Marine Corps Logistics Base (MCLB), Albany as it is now known, was commissioned as the Marine Corps Depot of Supplies. By 1954 the station was sufficiently complete with warehouses and administration buildings to assume supply support for Marines east of the Rocky Mountains and in the Atlantic area. BRAC 2005 changed some of the functions of Barstow and Albany.

Marine Corps logistics operations on Okinawa are based at Camp Kinser [not Camp Kinzer], which has about a million square feet of warehouse space for Marine forces' use in the Pacific. For example, warehouses hold war reserve supplies on Okinawa that would support US operations, including 14,400 tons of ammunition, 5,000 pieces of unit and individual equipment, and 50 million gallons of fuel. In June 2000 JCP Okinawa Prefectural Committee Chair Seiken Akamine called on the prefectural government to request the Japanese and US governments to find out the cause and responsibility, checkup health and environmental damage, disclose information of military-related

waste in the US Camp Kinser, and immediately remove DU-bullets from the US Kadena arsenal depot. The US Army has 18 Depots in CONUS, 10 of them closed or slated for closure.

Following the September 11th terrorist attacks, it was reported that, “House Speaker Dennis Hastert and other top leaders of Congress were taken to the safety of a secure government facility 75 miles west of Washington.” [“Member of Congress condemn attacks,” By James Jefferson, The Associated Press, 11 Sept 2002]. It was also reported that, “Top congressional leaders were sent to a secure government facility 75 miles west of Washington. They returned Tuesday evening.” [“Secret Service takes leaders to secure locations as government responds to attacks,” By Laura Meckler, The Associated Press, 11 Sept 2002]. Route 601 [also called Blue Ridge Mountain Road] leads to Mt. Weather. One reporter traveling this road the afternoon of September 11th found “a traffic jam of limos carrying Washington and government license plates and even a motorcade led by eight Harley Davidson US Park Police.” [“Things That Go Bump In The Night At Cheney’s Cave,” by Paul Bedard White House Weekly December 4, 2001].

The Army Corps of Engineers completed the “Area B” underground complex in 1958-1959. Total construction costs, adjusted for inflation, are estimated to have exceeded $1 billion. Tunnel roofs are shored up with some 21,000-iron bolts driven 8 to 10 feet into the overhead rock. The entrance is protected by a guillotine gate, and a 10 foot tall by 20 foot wide 34-ton blast door that is 5 feet thick and reportedly takes 10 to 15 minutes to open or close.

The underground bunker includes a hospital, crematorium, dining and recreation areas, sleeping quarters, reservoirs of drinking and cooling water, an emergency power plant, and a radio and television studio, which is part of the Emergency Broadcasting System. A series of side-tunnels accommodate a total of 20 office buildings, some of which are three stories tall. The East Tunnel includes a computer complex for directing emergency simulations and operations through the Contingency Impact Analysis System (CIAS) and the Resource Interruption Monitoring System (RIMS).

An on-site 90,000-gallon/day-sewage treatment plant and two 250,000-gallon above-ground storage tanks are intended to support a population of 200 for up to 30 days. Although the facility is designed to accommodate several thousand people (with sleeping cots for 2,000), only the President, the Cabinet, and Supreme Court were provided private sleeping quarters. For Continuity of Government purposes, senior officials are divided into Alpha, Bravo and Charlie teams – the first remains in Washington, the second relocates to Mount Weather, and the third disperses to other relocation sites.

One gallon of water per person per day? They have ½ million gallons of water and a 90,000-gallon/day-sewage treatment? Those government folks are full of… something. I wouldn’t plan on getting into Mt. Weather if I were you; apparently members of the American Public aren’t ‘essential personnel’. Two hours or more of searching on the Internet gave me exactly zero information about a super-secret bunker at Holloman AFB. It must really be super-secret, huh?

1. The effects of a nuclear war that cannot be calculated are at least as important as those for which calculations are attempted.

2. The impact of even a “small” or “limited” nuclear attack would be enormous.

3. It is therefore reasonable to suppose that the extreme uncertainties about the effects of a nuclear attack, as well as the certainty that the minimum consequences would be enormous, both play a role in the deterrent effect of nuclear weapons.

4. There are major differences between the United States and the Soviet Union that affect the nature of their vulnerability to nuclear attacks, despite the fact that both are large and diversified industrial countries.

5. Although it is true that effective sheltering and/or evacuation could save lives, it is not clear that a civil defense program based on providing shelters or planning evacuation would necessarily be effective.

6. The situation in which the survivors of a nuclear attack find themselves will be quite unprecedented.

7. From an economic point of view, and possibly from a political and social viewpoint as well, conditions after an attack would get worse before they started to get better.

There is a final area of uncertainty that this study does not even address, but which could be of very great importance. Actual nuclear attacks, unlike those in this study, would not take place in a vacuum. There would be a series of events that would lead up to the attack, and these events could markedly change both the physical and the psychological vulnerability of a population to a nuclear attack. Even more critical would be the events after the attack. Assuming that the war ends promptly, the terms on which it ends could greatly affect both the economic condition and the state of mind of the population. The way in which other countries are affected could determine whether the outside world is a source of help or of further danger. The post attack military situation (and nothing in this study addresses the effects of nuclear attacks on military power) could not only determine the attitude of other countries, but also whether limited surviving resources are put to military or to civilian use.

Your Tax Dollars at work… They should have asked the Squirrels, we all knew that already.

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Holloman AFB [née Alamogordo AAF]

Holloman is located in New Mexico’s Tularosa Basin between the Sacramento and San Andreas mountain ranges. The base is about 10 miles west of Alamogordo, New Mexi-

co, on route 70/82; 90 miles north of El Paso, Texas; 70 miles east of Las Cruces, New Mexico. The base covers 59,639 acres of land and is located at an altitude of 4,093 feet. Holloman is home to the world's longest, 50,188 feet (almost 10 miles), and fastest, approaching 10,000 feet per second (Mach 9), Test Track.

Holloman Air Force Base is located approximately 90 miles (145 kilometers) north of El Paso, Texas, and 27 miles (43 kilometers) west of Alamogordo, New Mexico. The nearest major airport is in El Paso and has several major airlines. Alamogordo has a small regional airport and one small airline that stops at Albuquerque, New Mexico.

Holloman AFB is located in high desert country at an average elevation of about 4200 feet (1250 meters). There are approximately 300 square miles of mountainous terrain with peaks extending up to 9,000 feet Mean Sea Level (MSL). The mountains are covered with short- to medium-height vegetation on the east side with very little vegetation on the west side, which consists of 2000+ foot vertical cliffs. The desert floor is relatively flat with low vegetation and is nominally between 4000 and 5000 MSL. The maximum temperature can reach 110 degrees Fahrenheit in the summer and a minimum of zero degrees in the winter. Typically, the weather is pleasant, and there is very little test time lost to bad weather.

Located on the eastern edge at the southern part of WSMR, Holloman Air Force Base (HAFB) occupies 24,153 ha (59,639 acres) of land and houses 4,900 military, 870 civilian personnel, and is home to 380 members of the German Air Force. HAFB is home to F-117 (Stealth) fighters and is a WSMR Range customer. HAFB overflies virtually all of WSMR and utilizes the Red Rio and Oscura Bombing Areas in the northeast corner of WSMR, and YONDER Impact Area in the San Andres Mountains. HAFB shares boundaries with White Sands National Monument and WSMR and interacts regularly in various mission activities.

Holloman Air Force Base operates the Radar Target Scatter (RATSCAT) and RATSCAT Advanced Measurements (RAMS) facilities, and utilizes the Red Rio and Oscura Bombing Ranges, Yonder, and WSMR airspace for training. For WSMR areas used for HAFB training cooperates with WSMR and funds and executes certain natural resources projects.

In 1992, Holloman Air Force Base again garnered national attention when the Air Force's most technological fighter, the F-117A Nighthawk made its new home at Holloman. Holloman Air Force Base continues to serve at the forefront of military operations, with its F-117 "stealth" aircraft and serving as the training center for the German Air Force's Tactical Training Center.

Ground was broken at Holloman on Aug. 13, 1991, just 10 months before the first of the Air Force's fleet of F-117s arrived. The first eight F-117s arrived to a rousing welcome by the base and surrounding communities on May 9, 1992. By summer's end, all but eight of the aircraft had reached Holloman. Because the permanent hangars were still being constructed, the F-117s were placed in "clamshells," temporary hangars. The last

eight F-117s were still in Southwest Asia, poised to go back into action on a moment's notice. Six of those final eight participated in a punitive strike against Iraq in January 1992. Those eight found their way from Saudi Arabia to Holloman on July 13, 1993. With its transfer to Holloman the F-117 unit was designated the 49th Fighter Wing. Its three squadrons were named the 7th, 8th and 9th fighter squadrons – the units that made up the 49th Pursuit Group in the Pacific Theater during World War II.

On 1 May 1996, the German Air Force Tactical Training Center was established in concept with the 20th Fighter Squadron which provides aircrew training in the F-4F Phantom II. The TTC serves as the parent command for two German air crew training squadrons. The F-4 Training Squadron oversees all German F-4 student personal affairs, and provides German instructor pilots to cooperate in the contracted F-4 training program provided by the US Air Force (20th Fighter Squadron). A second TTC unit, the Tornado Training Squadron, provides academic and tactical flying training, by German Air Force instructors, for German Tornado aircrews. The first contingent of Tornado aircraft arrived at Holloman in March 1996. More than 300 German Air Force members are permanently assigned at Holloman to the TTC–the only unit of its kind in the United States. The German Air Force selected Holloman as an additional training site for its Tornado aircraft, and construction facilitated the maintenance and troubleshooting of the aircraft and related weapons systems. When the second phase was completed 2000, 30 more Tornado aircraft were stationed here, bringing the total to 42.

The Tactical Training Center was re-designated the German Air Force Flying Training Center July 1, 1999 in conjunction with its growing mission, and officially activated on March 31, 2000. All expenses involved in the Tornado and F-4 programs, including more than $140 million in construction, are paid by the German government. There are no specific costs to US taxpayers associated with either of these programs. All flying operations are subject to the control of Holloman's host US Air Force commander and are subject to all applicable Air Force and federal regulations and statutes. All activity in military airspace and ranges is controlled by the appropriate US authority for those areas. In addition, while in the US, all German military personnel are subject to the laws of the US Government.

Holloman High Speed Test Track (HHSTT) occupies 11 square miles in the northwest area of Holloman AFB and is adjacent to the 4000-square-mile White Sands Missile Range (WSMR). During operations, HHSTT restricts 1000 feet of airspace above the track for safety. Access to the track is limited during preparation and operations. HHSTT has supported up to SECRETSAR projects. The air space over the area is closed to all civilian air traffic and can be closed to all air traffic when requested. HHSTT is a one-of-a-kind aerospace ground facility.

Test capabilities include the following:

• Aircraft: crew escape, airblast, birdstrike, aeropropulsion, munitions launch, and infrared countermeasures

• Missile: guidance systems, aerodynamics, aeroelastics, dispensers, seekers, and components
• Life support systems: crew modules, decelerators, parachutes, ballutes/paraloons, canopies, and catapults
• Erosion: rain, dust/particle, hail, transpiration cooling, material ablation, heatshields, radomes, electro-optical windows, and re-entry phenomena
• Impact: warhead, fuse sensitivity, kinetic energy penetrators, hit-to-kill vehicles, hit sensors, survivability/vulnerability, and lethality.

HHSTT support resources encompass all the engineering, analysis, and manufacturing support a customer will likely need. HHSTT can provide the engineering design for a test, including the mechanical and aerodynamic aspects using modern CAD/CAM equipment. Fabrication shops can perform all the machining, sheet metal work, welding, heat treatment, and NDI that may be needed. HHSTT can provide the propulsion vehicles, heavy equipment, and geodetics for the test build-up, as well as perform instrument calibration, telemetry, photography, event timing (msec), and data processing/analysis.

The Radar Target Scatter [RATSCAT] Division is a one-of-a-kind facility combining the best in monostatic and bistatic radar cross section (RCS) measurements. Located on White Sands Missile Range, it is ideally situated to provide precision signature measurements of low observable weapon systems.

RATSCAT consists of two separate but complementary test sites. Mainsite, located on the alkali flats region of WSMR, provides the capability of measuring full-scale models and flyable aircraft weighing up to 100,000 pounds (220,000 kg). On-site radars provide frequency coverage from 140 MHz to 18 GHz with spot coverage at 35 and 94 Ghz. Two ground bounce ranges are available with monostatic and bistatic test locations up to 7500 feet from the radars. RATSCAT Advanced Measurement System (RAMS) is located 35 miles northwest of Mainsite at the base of the San Andres Mountains. RAMS is the premier outdoor static range for measuring low and very low observable targets at both low and high frequencies. The 8900-foot paved shadow range has two separate radar systems covering 120 MHz to 18 GHz with spot frequency coverage at 35 GHz. The retractable pylon can handle targets weighing up to 30,000 pounds (66,000 kg).

Because of their remote locations, both sites are ideal for testing highly sensitive targets. Security is integral to the operations at both sites. Several special facilities are available to store, paint, and repair customers' targets, as well as fabricate frequency tuned columns and sub-scale models. Ground access is controlled through multiple guard posts, and civil air traffic access is prohibited.

The Central Inertial Guidance Test Facility (CIGTF) is located adjacent to WSMR which has restricted airspace from surface to unlimited. The area is seismically stable to the micro-g region, as required for precision guidance and navigation system testing. The CIGTF complex consists of 10 buildings on approximately 227,000 square feet of real estate. The laboratory operates three centrifuge test beds, with and without counterro-

tating platforms, subjecting test items to sustained acceleration environments up to 30g, 50g, and 100g. CIGTF uses a variety of reference systems to provide accurate Time Space Position Information in conducting its laboratory, van, sled, and aircraft tests. CIGTF Support Resources include a simulation laboratory, GPS satellite reference station, data analysis stations, and three state-of-the-art Portable Field Jamming Systems. The facility offers in-depth test-article performance evaluation and analysis capability in support of its GPS integration mission. CIGTF uses the highly accurate sled track for testing precision guidance systems and validating post-mission filters, smoothers, and reference systems.

Ground zero at Trinity Site is the spot where the world changed. It is where the first atomic bomb exploded. The story of Trinity Site, on the north end of White Sands Missile Range in Southern New Mexico, began in June 1942 with the establishment of the Manhattan Project. The goal of the project was to design and build a nuclear weapon, which noted immigrant scientists such as Albert Einstein and Enrico Fermi said was possible. At the time, the project was a race to beat the Germans who, according to intelligence reports, were building their own atomic bomb.

Los Alamos National Laboratory was established in northern New Mexico to design and build the bomb. Los Alamos scientists designed bombs using uranium and plutonium. The uranium bomb was a simple design and scientists were confident it would work without testing. The plutonium bomb, in contrast, was more complex and worked by compressing the plutonium into a critical mass using high explosives. Manhattan Project leaders decided a test of the plutonium bomb was essential before it could be used as a weapon.

From a list of eight sites in four states, Trinity Site was chosen for the test. The area already was controlled by the government because it was part of the Alamogordo Bombing and Gunnery Range, established in 1942 to train bomber crews. In the fall of 1944, soldiers started arriving at Trinity Site to prepare for the test. Life at Trinity Site was frustrating for most of the soldiers. They wanted to contribute to the war effort and being stuck in the desert without a clue as to why was not their idea of being useful. Most did not find out about the bomb until the actual test.

To calibrate the instruments that would be used to practice a countdown and later measure the atomic explosion, the Manhattan scientists ran a simulated blast on May 7. They stacked 100 tons of TNT onto a 20-foot wooden platform just southeast of ground zero. The explosion destroyed the platform, leaving a small crater.

Two months later, scientists prepared for the real test as two hemispheres of plutonium were delivered to the George McDonald ranch house just two miles from ground zero. On the Friday before the test, the plutonium core was taken to ground zero for insertion into the bomb. On the first try, the device stuck. But after letting the temperatures of the plutonium and casing equalize, the core slid smoothly into place.

The next morning the 5,000 pound bomb was raised to the top of a 100-foot steel tower and placed in a small shelter. Three observation points, wooden shelters protected by concrete and earth were established at 10,000 yards from ground zero. The south bunker served as the control center for the test. The automatic firing device was triggered from there as key players in the project watched.

Most scientists and support personnel, including Groves, watched the explosion from a base camp about 10 miles from ground zero. Most VlPs watched from Compania Hill, about 20 miles away. The test was scheduled for 4 am, July 16, but rain and lightning early that morning caused it to be postponed.

Just over an hour later the countdown started, and the device exploded successfully at 5:29:45 am Mountain War Time with a yield of 22 kilotons of TNT. To most observers. the brilliance of the light from the explosion watched through dark glasses overshadowed the shock wave and sound that arrived later. At ground zero the 100-foot steel tower was instantly vaporized. The explosion dug a huge crater about a quarter-mile across and six feet deep; its surface was covered with green glass created as the sand melted in the intense heat. The glass was later dubbed “Trinitite.”

The flash of light from the explosion was seen and heard hundreds of miles away. The shock wave broke windows in Silver City NM, about 120 miles away. The Army kept the test secret by announcing that an ammunition dump had exploded at the Alamogordo Bombing Range. The true story was not released to the public until the United States bombed Hiroshima, Japan, with a uranium bomb on Aug. 6, 1945.

Interest in the site was immediate and has remained high. Missile testing in the area at what is now White Sands Missile Range kept the site from becoming a national monument. But the range has opened the site to the public regularly for 35 years on the first Saturdays in April and October. Today the crater no longer exists. A lava obelisk about 14 feet high marks ground zero, the spot on the ground amid the four legs of the steel tower. Most of the Trinitite was scraped up and removed in 1952. However, missile range personnel have uncovered several square feet of the original crater floor which has been protected under a foot of sand in a small shelter during the past 50 years. The site is still radioactive and the missile range provides radiological health technicians to educate visitors at open houses. But in truth, the area’s radioactivity is relatively low; a visitor who spends one hour at ground zero receives less than half the radiation received during a cross-country airline flight.

Alamogordo Army Air Field was established at a site six miles west of Alamogordo, New Mexico on June 10, 1942. Initial plans called for the base to serve as the center for the British Overseas Training program; the British hoped to be able to train their aircrews over the open New Mexico skies. However, everything changed when the Japanese launched a surprise attack against the Hawaiian Islands on December 7, 1941. The British decided to no longer pursue its overseas training program, and the United States military saw the location as an opportunity to train its own growing military. Construction began at the airfield on February 6, 1942 and forces began to move in on May 14, 1942.

From 1942-1945, Alamogordo Army Air Field served as the training grounds for over 20 different groups, flying primarily B-17s, B-24s, and B-29s. Typically, these groups served at the airfield for about six months, training their personnel before heading to combat in either the Pacific or European Theater. The 450th Bombardment Group was one of the many to cut its teeth at Alamogordo. After training, the group went on to serve in nearly every major combat operation in Italy, France, Germany, Austria, Hungary, and the Balkans. During their combat service, the 450th garnered two distinguished unit citations and 11 campaign credits.

After World War II, the future of the base was uncertain. In fact, rumors spread concerning the closure of the site, fueled by the fact that most operations had ceased. However, in 1947, a new era began when Air Materiel Command announced the air field would be its primary site for the testing and development of pilot less aircraft, guided missiles, and other research programs. For the next 25 years the site, which became known as the Holloman Air Development Center, and later the Air Force Missile Development Center, launched many missiles including Tiny Tim (the first Army rocket), Rascal, V-2, XQ-2 Drone, Falcon, MACE, Matador, and Shrike.

On January 13, 1948 the Alamogordo installation was renamed Holloman Air Force Base, in honor of the late Col. George V. Holloman, a pioneer in guided missile research.

Holloman Air Force Base wrote its name into the annals of American history in the 1950s and 1960s. On December 10, 1954, Lt Col (Dr.) John P. Stapp received the nickname “The Fastest Man Alive” when he rode a rocket propelled test sled, Sonic Wind No. 1, to a speed of 632 miles per hour. Additionally, Captain Joseph W. Kittinger Jr. stepped out of an open balloon gondola at 102,800 feet on August 16, 1960, in an attempt to evaluate techniques of high altitude bailout. Capt Kittinger’s jump lasted 13 minutes reaching a velocity of 614 miles per hour. That jump broke four world records: highest open gondola manned balloon flight, highest balloon flight of any kind, highest bailout, and longest free fall.

On January 31, 1961, HAM, a three-year-old chimpanzee, blasted off from Cape Canaveral to altitude of 157 miles inside a Mercury-Redstone capsule, as a final check to man-rate a capsule and launch vehicle. HAM thus became the first chimpanzee to go into space. A final noteworthy event occurred on November 29, 1961, when ENOS, a chimpanzee trained at Holloman’s HAM facility (Holloman Aero-Medical laboratory), was the first US specimen launched into orbit. ENOS was launched in a Mercury-Atlas capsule that completed two orbits around the earth and was safely recovered three hours, 21 minutes later.

Another new era began in the Tularosa Basin on 1 July 1968, when the 49th Tactical Fighter Wing arrived at Holloman Air Force Base. The 49th’s F-4 Phantom IIs introduced a new era of fighter aircraft training and operations, which continued for the next three decades and until today. In 1977 the 49th transitioned to the F-15 Eagle, the Air Force’s top air-to-air weapon.

What Will Happen – Chapter 5 – TICK, TICk, TIck, Tick

Washington, DC…

“What’s up now, another airplane in the exclusion zone?”

“No Sir, we’re evacuating to Mt. Weather.”

“Wait a minute; I’m not going anywhere until I know what’s going on.”

“I’m sorry Mr. President; we’ll fill you in on the way. Is the football ready to go?”

“The Secret Service Agent’s cell phone rang. “Incoming call from NORAD, Mr. President, we’ll get it on Marine One.”

“President Bush. Just like that? Taiwan? Move us to DEFCON-2 and sortie the fleets. Have the bombers everywhere loaded with nuclear weapons. Get all of the tankers standing by to get airborne on a 5-minute alert. Arm all of the fighters and put them on a 5-minute alert, too.”

“Trouble, Sir?”

“The Chinese have sent missiles against Taiwan. NORAD doesn’t know yet if they’re conventional or nuclear. Crap. How long to Mt. Weather?”

“We’re moving as fast as we can, Sir. Maybe 50 minutes, maybe a little longer.”

“This is the President, get me the SECDEF.”

“How come we knew nothing about this Don? What do you mean ask John Negroponte? I’m asking you. What do you mean no one had any idea the Chinese were preparing to attack Taiwan? Don’t we have satellites? Yeah, I know, it’s the turf wars. Hold on, I have another call. President Bush.”

“How long to sortie the Carrier Strike groups? Just send them, the personnel and the other ships will just have to catch up. I want you to start evacuating our troops out of Korea. Yes, immediately, hang on a minute. Don? I’ve ordered our troops pulled out of Korea. How long? Just leave the stuff and get the people. You start evacuating our people out of Afghanistan and Iraq. I don’t give a flip what they think, do it.”

“Mr. President, do you think that’s necessary?”

“Yes, Condi, I do. I want it done now. Let me finish this other call. This is the President, standby to go to DEFCON-1. Activate the EAS and tell the American Public to leave work and return to their homes. Oh, really? Good. We’re in route to Mt. Weather, have someone from FEMA make the announcement. Just tell them this is the most serious

situation since the Cuban Missile Crisis. Start running those films FEMA prepared on improvised shelters. And, whatever you do, don't run the Duck and Cover films."

"Condi. The weapons they used against Taiwan weren't nuclear. We have time because it will take time for our forces to reply to the Chinese provocation. I need someone working on estimates of steaming times to Taiwan. You call Don back and get an answer."

"Pearl Harbor to Taiwan is about 5053 miles (8131 km) (4391 nautical miles), San Diego is 6889 miles (11086 km) (5986 nautical miles) and Bremerton is 6042 miles (9724 km) (5251 nautical miles). The Carriers are capable of 30+ knots without going to flank speed. At 30 knots that's 146 hours, 199 hours or 175 hours. At flank speed, I think they can cut the time to 125, 171 and 150 hours." (I used 35 knots as flank speed in my calculations because I have no idea how fast it is or how long they can sustain flank speed.)

"Five, seven and six days? I want the entire Pacific Fleet headed to Taiwan at flank speed. Now, Condi."

The homeports of the Pacific carriers are: Nimitz-San Diego, Vinson-Bremerton, Lincoln-Everett, Stennis-Bremerton, Reagan-San Diego and Kitty Hawk-Yokosuka, Japan.

"The Nimitz is in the Pacific, Vinson is in the Persian Gulf, Lincoln is at sea doing readiness training, Stennis is in dry dock, Reagan is underway in the Pacific and Kitty Hawk is underway."

"Time to first Carrier Strike Group on scene?"

"A little over 24 hours, Mr. President, it will be the Kitty Hawk."

"Stick a fire cracker up the Pentagon's butt and find out when we can have a second Carrier Strike Group on scene."

"Yes Sir."

°

Do you remember the scene in *Top Gun* where both of the catapults were down and Stinger says, *Bull shit ten minutes! This thing will be over in two minutes! Get on it!* Then Maverick shoots down 3 planes and Iceman shoots down one? They've retired the F-14's you know. They're being replaced by Super Hornets. A Super Hornet is almost the same size as an F-14, but it can't carry Phoenix missiles. On July 15, 2004 – The last AIM-54 was shot by VF-213 Cag-8: Pilot- LCDR Mark Tankersley and RIO- LTJG Scott Timmester. All but 6 Tomcats have been retired and complete Phoenix divestment was over by 30 September 2004. To ensure a smooth divestiture toward this date, a transition message that defined the required tasks was sent to all Phoenix activities. It's ok, Tom Cruise is fighting the Martians now and he has a gig doing Mission Impossible

Our longest-range missile is now the Aim-120 AMRAAM. I suspect that they'll equip the F/A-18's with 2 Aim-9 Sidewinders and 2 Aim-120 AMRAAM missiles (17.38nm).

The 1997 Omnibus bills removed $15M from 3600 funding. This impacted the Phase 2 schedule, which in turn delayed the Phase 3 work by one year. Without Phase 3, the AMRAAM will not be able to counter future threat aircraft or Electronic Counter Measures employed by the threat. Phase 3 will produce the Aim-120C-7.

Phase 3 propulsion is currently unfunded by both USAF and USN. The 1995 AMRAAM COEA stated the +11" rocket motor was the best alternative at the time. Technology has continued to investigate propulsion alternatives. There are currently four different propulsion alternatives being evaluated. The Future Medium Range Air-to-Air Missile (FMRAAM) being investigated by the United Kingdom is also an alternative to AMRAAM propulsion upgrade. Surprised? I'm not, upgrading the missiles made sense. If you check with the manufacturer of the missile the Aim-120-5 is the latest variant. If someone is going to start a war, they'd better do it before our AMRAAM missiles are outdated, hadn't they? Wait, there's more. After successfully deploying the Aim-120C-7, they developed the Aim-120D which has entered into full production.

BTW, they now call them Carrier Strike Groups instead of Carrier Battle Groups. A rose by any other name… A typical Strike Group has a Carrier, a Ticonderoga class Guided Missile Cruiser, 2 Arleigh Burke class Guided Missile Destroyers, an attack submarine and a combined ammunition, oiler and supply ship. They may also include a Spruance class Destroyer, and a couple of Oliver Hazard Perry class Frigates. A Battle Group has Amphibious Forces, in case you want to know the difference between a Battle Group and a Strike Group. A couple of the Strike Groups have 3 Cruisers, 3 Guided Missile Destroyers and 2 688I class submarines. I wasn't in the Navy, so that is semi-informed speculation.

Is there any doubt in your military mind that we can't kick butt and take names? Modern warfare is all about missiles. It is pretty hard to take out a Carrier Group unless you employ nuclear weapons and then all bets are off. The Chinese Air Force recently acquired some Su-30 fighters, I suppose I told you. That suggests to me that their aircraft are land based. And an F/A-18 isn't an F-15; they're a whole generation newer.

°

At the Top of the Hour, the North Koreans are starving and China had decided it wants Taiwan. Is there any good news? A little, but not much. The Republic of China (Taiwan) is putting up a struggle. It takes 2 Carrier Strike Groups to maintain around the clock operations. The Kitty Hawk moved into the South China Sea and here came another US Carrier Strike Group. The oiler can't keep up, but it's chugging along and won't be long coming. It's the Abraham Lincoln Strike Group and the Ronald Reagan isn't far behind. The Carl Vinson was in the Indian Ocean coming this way and the Harry S. Truman with its large Strike Force accompanied her. I can just hear that Chinese Commander saying, "Oh, oh, here comes trouble." He obviously never met Admiral Isoroku Yamamoto.

The Japanese success at Pearl Harbor was overwhelming, but it was not complete. They failed to damage any American aircraft carriers, which by a stroke of luck, had been absent from the harbor. They neglected to damage the shore side facilities at the Pearl Harbor Naval Base, which played an important role in the Allied victory in World War II. That was Admiral Naguma's fault. He retired from Pearl Harbor early and then lost 4 Carrier's at the Battle of Midway. He was too conservative to implement Yamamoto's plans. Yamamoto was supposed to have said, *I fear all we have done is to awaken a sleeping giant and fill him with a terrible resolve.*

The United States has almost 7 times as many nuclear warheads on its 14 SSBN's as China has in its entire arsenal. That's not counting the 500 Minuteman III missiles and the 50 Peacekeeper missiles. At any given moment, the US could deliver a minimum of 3,688 warheads, probably more. There was no need to use the nuclear weapons; the US also had smart bombs.

◦

"What's the Order of Battle, Mr. President?"

"Don, you tell CINCPAC to prosecute it anyway he wants, but don't go nuclear."

"He'd need the PAL codes to do that."

"Yeah, huh? Condi, did you reach Beijing?"

"They're out to lunch."

"I know that. Who in their right mind would think that I'd let something like this pass?"

"No, Sir, they were literally out to lunch. They've been unavailable since the attacks on Taiwan were launched."

"Don, tell CINCPAC to sink their Navy."

"Yes Sir," SECDEF grinned.

Ring…

"I wonder what NORAD wants now. President Bush."

"What? What is that Despot thinking? Have you notified South Korea and Japan? I'd get the football, but I only authorize the release of two Trident D's. Get me the officer with the nuke codes."

"What's up?"

“Kim Jong-il is fueling his missiles.”

“That will be one less outpost of tyranny to worry about.”

“That was a nice comeback you gave their Ambassador, Condi. Did you really say, *Kiss my black butt?* You go girl.”

A few minutes later World War III began in earnest. The NCA issued the PAL codes and authorized the release of 2 Trident D missiles from a boomer against North Korea.

“That was easier than I thought. Move us to DEFCON-1, the threat level to red and I’ll notify the Russians myself.”

“Vlad, Dubya. Fine, thanks, Mt. Weather has pretty good facilities. Say, Kim started to fuel his missiles and I authorized the release of 2 Trident D’s against his outpost of tyranny. Well, the spread on the MIRV’s requires that we use 2 missiles. We’re going to DEFCON-1, and threat level red. Really, how long have you been in the shelter? You don’t really think they’d be stupid enough to attack the two of us, do you? I’ll tell Don. Give our regards to Liudmila.”

◦

In response to US and EU leaders who have criticized Putin on taking a hardline in dealing with the Chechens “Why don’t you meet Osama bin Laden, invite him to Brussels or to the White House and engage in talks, ask him what he wants and give it to him so he leaves you in peace? You find it possible to set some limitations in your dealings with these SOBs, so why should we talk to people who are child-killers? No one has a moral right to tell us to talk to child-killers.”

Putin, deadpan, said of the very recently and thoroughly briefed US President Bush, “This is a man who reads.”

When a reporter asked Putin why his government didn’t negotiate with the leaders of Chechen rebels, Putin answered, “Russia doesn’t negotiate with terrorists. It destroys them.”

After the tragedy of Beslan, Putin explained the failure of Russia’s Security Services with the sentence, “We were weak. And the weak are being beaten.”

Putin on Chechen rebels: “We’ll follow terrorists everywhere. Should we catch them in a shithouse, we’ll kill them in a shithouse.” (Direct quote, he cussed, I didn’t.)

Now you know why Dubya and Vladimir are friends…

◦

“Don, Vladimir thinks that the Chinese will attack our 2 countries when we kick their butt. They have their missiles ready to fly against China. What do you think would be the likelihood that we could pull off a first strike and neutralize them?”

“Not likely, they have satellites, too. Dispatch the other 9 B-2’s to Guam.”

“Yes Sir. B-83’s?”

“Crank them to their highest setting. I’d better address the nation.”

“My fellow Americans…

“It is with a heavy heart that I come to you this evening. Kim Jong-il has fueled his missiles and I ordered the release of nuclear weapons against North Korea. As you all know, China has attacked Taiwan. We have 3 Carrier Strike Groups in the South China Sea and two more are in the Indian Ocean steaming to Taiwan at top speed.

“I have consulted with President Putin and we are both concerned that should we defeat the invasion of Taiwan, the Chinese may release their nuclear weapons against Russia and the United States. While I pray that doesn’t happen, I’m warning the American Public that it is time to make any last minute preparations in case the Chinese attack us.

“For the first time in history, we are at DEFCON-1 and the threat level is red. Any Chinese attack on this country will not go unanswered. We will not be the first party to use nuclear weapons in a confrontation with the People’s Republic of China.

“Laura and I are praying for everyone. God Bless America.”

°

“Sharon, have you seen my baseball mitt?”

“What do you want that for?”

“It’s the beginning of WW III.”

“We don’t have a shelter, Gary. What are we going to do?”

“Do we have any money?”

“We just got all of the checks and I haven’t paid the bills.”

“I think we could tunnel under the slab. The west end is about 9” thick because Joe didn’t grade before he poured the concrete.”

“How would you support the slab?”

“Shoring. Why don’t we go to the lumberyard?”

“Where are you going to put the dirt?”

“On top of the slab. 16” of dirt cuts the radiation by 90%”

“Did you need to buy so much lumber?”

“Go to Costco and get foods that we can eat unprepared. Get some rice, too and 5 more cartons of Kool’s.”

“I can only buy 2 cartons at a time.”

“How many checkout lanes do they have?”

“Ok, I’ll buy six cartons. I’m going by Smart and Final and get white beans, too.”

“You’d better get a couple of the 25# bags of pintos, 100# of rice, 300# of flour, 100# of sugar, a couple jars of yeast and shortening. Buy that small generator they have and some gas cans while you’re at it. I’ve got to get started digging.”

“Ron, Gary, I need help.”

“Hey butthole, what are you doing now?”

“Tunneling under the slab and building a bomb shelter.”

“Are you nuts?”

“Did you hear Dubya on TV?”

“No, now what?”

“Dubya nuked North Korea. We’re going at it with the Chinese and I can’t find my base-ball mitt.”

“I’ll be right over.”

“Call Clarence and bring him too. With your bad heart I may use up both of you.”

“Look guys, none of us have a basement. I went to the lumberyard and got all of that wood for shoring. Starting right here at this crack, the slab is extra thick because the guy who poured it didn’t grade before he poured the concrete. I know that it’s 9” thick in one spot. I figured we could cut a grade down parallel to the slab about 10’ deep. Then

we can start to tunnel under the slab. It won't be much of a shelter, but it's all I can come up with."

"Gary, I'll call James and Clarence and get them to help us tunnel."

"I'll get John to help too. How were you planning on filtering the air?"

"I hadn't gotten that far, Ron."

"I'll send Linda to get several 10 gallon tanks of propane, a couple of propane stoves and a couple of lanterns. She can get some of those HEPA air purifiers from Costco."

"I told Sharon to get a small generator so we might be able to rig up something so we can keep the meat frozen."

"How long to you figure we have?"

"I don't know. We're probably a day late and a dollar short."

What Will Happen – Chapter 6 – TOCK!

“At least 10’ deep, maybe 11’, we have to leave room for the beams to support the slab.”

“How big are you planning on making this hole of yours?”

“I got 16’ 2×12’s. Sixteen feet wide, I guess. That will give us a space 15’ deep by 16’ wide.”

“That’s only 240 ft².”

“Do you know how many people are we going to have?”

“Your clan is 12, mine is 5 and Clarence’s is 10, 27 people total. There isn’t enough room.”

“Go to the lumberyard and get enough shoring for another 15’×16’ wide chamber. We’ll excavate the first one and start on a second.”

“Are you sure this is the best plan, Gary?”

“I’m open to suggestions.”

“480 square feet isn’t much space. That’s only 18 ft² per person.”

“The Swiss allow less than 6 ft² per person and USS only allows 10 ft² per person. We’ll get by, especially if we can excavate the second shelter. We’re going to have to move the ramp over to the middle of the lawn. Maybe you’d better pick up some plywood to hold the dirt in place. We’re going to need to leave 16” of dirt under the slab, and 24” would be better.”

“Do you know what you are doing?”

“No, do you?”

We ended up with two chambers, each 16’ wide, continuous, and 13’ deep. The total shelter area was 416 ft². That only left a little over 15 ft² per person. Clarence got a 300-gallon fuel oil tank for a furnace and we filled it with gasoline. The tunnel went 10’ straight out into the back yard and made a turn and went another 10’ before it started to climb up the ramp. We used plywood and framing and covered the tunnel with boxes of dirt containing 48” of dirt. We had 48” of dirt on the slabs. Among the 3 of us, we got a chemical toilet, the 2 propane stoves and lanterns and had a 3kw generator to keep the new freezer going. I called Gonzales, Texas, but they were sold out. We didn’t take any chances on supporting the slab. It was heavy to begin with and piling 4’ of earth on top only made it heavier.

“I doubt they’ll strike Plant 42, but if they do, it is 2 miles away. At 2 miles from ground zero, our overpressure could be as high as 5 pounds per in^2 and the radiation level would be 3,000 Rems. If they hit Plant 42, we’re dead meat. Otherwise, we’ll be ok.”

“Is that a promise or a prayer?”

“Yes.”

“If they hit LA, we could get 2,000 Rads initially.”

“What have we overlooked?”

“How much ammo do you really have?”

“Not enough, Sandy’s?”

“Five days on a rifle and fifteen days on a hand gun, fellas.”

“How about I lay $600 on the counter and steal the Vaquero?”

“Make it $750, you’ll need to steal ammo too.”

“Put a $750 package on the counter and I’ll examine the goods.”

“What about a rifle?”

“I’ve got $1,250 to spend.”

“Let me put everything on the counter and you write the check. I’ll have to go into the back room to call it in to the bank.”

“What do you need Ron?”

“.223 ammo.”

“How much?”

“A couple of cases, we’ll probably go to Barstow when the radiation dies down.”

“Clarence?”

“Do you have a 590A1 and a case of tactical buckshot?”

“I’ll go call the bank, Gary.”

“Nice not doing business with you Sandy.”

°

We were as ready as we could get. I’d run out of money, but if the bank really wanted the house, they could have it. We didn’t have any radiation detection equipment. How would we know when to apply the Seven-Ten Rule? We laid plywood on the floor of the shelters. Nobody wanted to go into the shelters until the last moment, they were, shall we say, close? The little generator ran for 7 hours on 5 gallons of gas. If it didn’t seize up due to lack of maintenance, we had enough gas to run it for 420 hours plus an additional 50-gallons in 5-gallon cans. Ron found a place in the Valley that sold certified CD V-715’s and V-717’s. He bought one of each and a large supply of KI. That’s it, end of our preparations.

Cheyenne Mountain…

“We have a launch.”

“Do you have trajectories?”

“In a minute.”

“Mr. President, we have a launch.”

“Approximately 150 are targeted for Russia and 250 for us.”

“250 incoming, Mr. President. Yes Sir, I’m ready to copy.”

“Yes Sir, we notify the Russians. No Sir, I recommend all 500 of the Minuteman III missiles. Yes Sir.”

“Are the targets laid in?”

“They’re all targeted on China.”

“Here are the PAL codes.”

“Is it confirmed?”

“Correct codes, launch when ready.”

“All of the Minutemen?”

“All 500 of them. Hold the Peacekeepers.”

“Yes Sir.”

°

It is a little more complicated than that, but not much more complicated. If they make it too complicated, they'll never get the missiles off the ground. NORAD issued orders for all aircraft in CONUS to launch. The EAS system swung into action and people tried to take cover as best as they could. We all crawled into the shelters. It was 31 people; I'd forgotten Chris and Patti and Chris brought the radios. Patti had 6 cans of coffee and her own Marlboros. We only had a little over 14 ft^2 per person. The jury-rigged air filtration system was two boxes each containing HEPA filters and the boxes were in series. We exhausted the air from the shelter using a fan from our old range hood. Necessity is the mother of invention.

About 30 minutes later, the ground shook real good that must have been LA. A few moments it shook again. Two? Or, was that China Lake or maybe Barstow/Ft. Irwin? The Lancaster radios stations went off the air. We had a single 100-watt bulb jury-rigged in each half of the shelter.

°

"It's starting to click."

"How high?"

"100 and climbing."

"We'll start our countdown when it comes back down."

"How long?"

"How the hell do I know? When it comes down to 500R, we start counting the 343 hours. What's the level down here?"

"The meter is on the lowest scale and it's not moving."

"Not bad for an old fart."

"We aren't out of the woods yet, Gary."

"Once the radiation level maxes out, we'll have a better idea where we stand. No matter how high it goes, remember that in 7 hours, it will fall by 90%. So, if the fallout peaks at 2,000R, we'll be down to 200R in 7 hours. We start counting down from 500R, if it goes that high."

"It's getting there now, Gar-Bear."

“Turn the meters off for about 5 hours to save the batteries. We’ll catch it on the way down. When it hits 500R, we’ll start the countdown. In 343 hours from that point, the level should be down to 500mR. A really safe level is probably about 50MR. That would take 2,401 hours or 100 days.”

“100 days? Jesus H. Christ!”

“Daily exposure limits are 2.5R, Ron. Anything over 300R in 4 months could lead to health problems, including death. However, we can venture out and begin re-allocating resources after a couple of weeks.”

“But if the daily exposure limit is 2.5R, which means we can stay outside once the level reaches 100mR/hr, right?”

“Actually, 104mR/hr but close enough. I think the children should be limited to half of that and any more of the women wanting to have babies.”

“What did you mean re-allocate resources?”

“I think he means steal, Clarence.”

“It won’t matter. Anyone who isn’t sheltered at this radiation level is going to die anyway. A radiation dose is cumulative.”

∘

Mt. Weather…

“How badly did we get hit?”

“150 on military targets and 100 on the largest cities. We won’t be able to leave for at least 2 weeks, Mr. President.”

“Casualty estimates?”

“Between the strikes and the immediate fallout, maybe 100-million.”

“And after?”

“Probably another 50 to 100-million.”

“What about China?”

“It won’t make a good parking lot for about 30 years.”

“The Navy? What about the Carrier Strike Groups?”

“They turned east and bolted at flank speed when we went to DEFCON-1.”

“What else?”

“India and Pakistan went at it. It is most definitely a case of Mutually Assured Destruction.”

“Our troops?”

“Better than anticipated, we had time. Maybe we lost 10%. Are you going to put FEMA in charge of the clean up?”

“Are you nuts? They couldn’t find their way out of a wet paper bag with a map and a flashlight. I’m suspending Posse Comitatus and invoking martial law. Can we get the word out?”

“Less than 5% of the radio stations are hardened against EMP, Mr. President.”

“Put out the word where you can. Advise everyone to stay under shelter until a minimum of 14 days. Invoke a dusk to dawn curfew. Let everyone know that it will be at least 2 weeks before any help is available.”

“Kennedy, Schumer and Clinton are raising hell.”

“Bring the 7 assholes to see me.”

“Yes Sir.”

“Sit down and shut up. Here’s the deal. 150 weapons hit the United States military installations and the Chinese hit our 100 largest cities. I’ve invoked the existing Executive Orders and invoking martial law. I’m also suspending Posse Comitatus for the duration of the emergency. You have 2 choices, be part of the problem or part of the solution.”

“Mr. President I protest,” Teddy said.

“I agree, you can’t suspend Posse Comitatus,” Chuckie added.

The only person who didn’t have anything to say was Hillary. She had spent 8 years in the White House and no doubt Bill and she had talked about what they’d do if it came to this. More than anyone else in the room, except the President, Hillary probably knew the score.

“Senator Clinton, you stay. The rest of you are under arrest. Someone go get Bill.”

“Mr. President, we just heard from your father. He and your mother are safe.”

“What about the remainder of the former Presidents?”

“Carter was in Plains. Ford was in Palm Springs. Clinton is on his way to the office.”

“I want Dad, Carter and Ford here as soon as it is expedient. One of us should be able to figure where to go from here.”

“Mr. President.”

“Mr. President. Cut the formality, Bill we have a mess on our hands.”

“You mean you have a mess on your hands, don’t you?”

“Bill, we’re either part of the solution or part of the problem. The problem people are under arrest,” Hillary explained.

“Really? Ok, what have you done so far George?”

“I invoked the existing Executive Orders, declared martial law and am suspending Posse Comitatus. As soon as Dad, Carter and Ford can be brought here, we’ll add them to the mix.”

“What’s the damage assessment?”

“100-million.”

“Better thee than me.”

°

Two weeks later…

“What’s the level outside now?”

“250mR.”

“John here’s a list of drugs. You go to Wal-Mart or anywhere you need to go and pick them up. Ron, let’s get our weapons and bug out for Barstow.”

“How do you know they didn’t hit Barstow?”

“I don’t know. But if they didn’t, we’d better get there before the military does. I made a list of the things we’re going to need.”

Weapons:

M14 rifles
M16A3 rifles with M203
M82A1 rifles, if available, or
Mk15 rifles, if available
M240 machine guns
M2HB machine guns
Mk19 machine guns
M252 Mortars

Ammo:
5.56×45mm loose
7.62×51mm loose and belted
.50BMG loose and belted
40mm grenades M406 a/o M433
40mm grenades M430 belted

Ordnance:
M14, M16 and M18A1 mines
M72 LAW
M136 AT4
M112 and M118 C4
81mm mortar rounds assorted
Hand grenades M67
Smoke grenades
Other grenades, if available

Other:
MRE’s
BDU’s
Interceptor body armor
Night vision equipment
SINCGARS radios
Combat Lifesaver Med kits
Individual med kits
Web gear ALICE
M14, M16 and M82 magazines
Infantry modification kit, for the M240

“Are you sure you didn’t forget the kitchen sink?”

“Add one to the list, if you think we need one.”

“I’m too old for this stuff.”

“Aren’t we all?”

“What are we going to drive?”

“Anything that will start. Dave Lucky has a Chevy pickup that’s older than dirt. He has a small trailer, too.”

“We’re going to need a semi for everything on your list.”

“Suits me, where can we steal one?”

◦

“We need to get troops to Barstow before the Patriots loot it, Mr. President.”

“I’d give them 48 hours and then we go in and protect whatever is left.”

“So, did everyone hear what Condi told the North Korean Ambassador?”

“What?”

“I told him to *kiss my black butt*.”

“Why is Hillary sitting in on these meetings?”

“All of the former Presidents are sitting in.”

“I’ll go get Barbara, then, son.”

“You do that, Dad. Jimmy what about Roselyn?

“She didn’t get too involved and Betty had her problems, right Jerry?”

“She doesn’t need the stress.”

“Before anyone asks, the North Koreans were fueling their ICBM’s. The Chinese launched first. Putin survived the attack on Russia because he was in a shelter. All of the leaders of the major powers, except maybe China survived. We used nuclear bunker busters on the Chinese.”

“I didn’t know we had any.”

“Well, we didn’t, officially.”

“What are the Israelis doing?”

“They have all of their fighters equipped with nuclear weapons. No one has made a move against them.”

“Pity.”

“Who said that?”

°

“How is the survey meter doing?”

“It isn’t going up, if that’s what you mean. About 200mR.”

“We have to get in and out and be back in the shelters within an elapsed time of 10 hours. Where did you find the semi?”

“It was just sitting there.”

“Who hot-wired it?”

“I did,” David replied.

“Listen, get 30 of each of the weapons on the list except for the ammo and munitions. Get all of those we can carry. The heavier stuff we only need 4 of. Maybe we can find some M1114’s”

“What are those?”

“Up-Armored Armament Carriers, HMMWVs.”

“How many do we want?”

“How many drivers do we have?”

“11.”

“We want 10.”

What if I’d have said 13?”

“Then I would have answered 12. There are just some things you can never have too much of.”

“Like what?”

“HMMWVs, ammo, cigarettes and toilet paper.”

“What about anything not on the list?”

“Well, if you can find me a Thompson, I’d be eternally grateful. I’d prefer the older model that takes the drums and about a dozen drums. That’s the model M1921. The drums hold 50 or 100 rounds.”

“Why do you want one of those, aren’t they heavy?”

“Yeah but before he switched to the M14, Ben Raines favored the Thompson.”

“Huh?”

“It was before he knew us, Clarence.”

“The original 1928 were nothing more than 1921’s with an over stamp. They would take every magazine they made for the Thompson and had the front and rear pistol grip. They were the best of the lot, but the government only bought about 400 of them. I’ll take whatever you want, but if there is any chance of finding an over stamped 1928 and some of those drum magazines, I could hold off an army.”

What Will Happen – Chapter 7 – Barstow

“If I recall correctly, we’ll find the vehicles at the Yermo Annex.”

“Where do we want the semi?”

“Let’s go to Yermo first and find some Hummer’s. Drop David off on the way so he can open up the administrative offices and find an inventory list of where everything is stored.”

“Good thinking.”

“I used to be an accountant, I think like that.”

“David, how long will it take you to open the place up?”

“A couple of minutes.”

“Why don’t we take him with us and let him drive back the first Hummer, Gary?”

“I don’t know; because that would make too much sense?”

“I miscounted people, we have 13 all together.”

“Who did you forget?”

“The women.”

“13 people means 12 HMMWVs and one to drive the semi. Hook onto fuel trailers and fill them with JP-8.”

“What’s that?”

“What the military uses in all of their vehicles, jet fuel.”

“There are some portable generators, here.”

“Put them on the semi, we need to tow all of the fuel trailers we can find.”

“There are only 8 fuel trailers.”

“Then take 4 generators. That way, you fellas can power your homes.”

“They’re on skids, not on wheels.”

“What is the model number on those generators?”

“806A.”

“Are they about 7’ long, 3’ wide and 5’ tall?”

“Yep.”

“How many did you find?”

“What’s so special about these generators?”

“They’re 60kw, 60hz, Tactical Quiet Generators. How many are there?”

“6.”

“Take them all and we’ll put ammo in the Hummer’s.”

It took a while but we loaded all of the generators on the semi, 3 layers wide and 2 deep. We fueled the Hummer’s and headed for Nebo. David made short work of the door; he had brought a sledgehammer. We located the things on the list and began to fill up the semi, Stacking lighter things on the generators, like the MREs, BDUs, etc. We didn’t find any Thompson submachine guns. Maybe they had some and maybe they didn’t. We found M1911s and added those to the list together with .45ACP ammo. The Marines never throw anything away. When they couldn’t use the linked ammo for the M85 machine gun, they stored 3-million rounds.

We had less than 3 hours of time left on the clock by the time we pulled out of Barstow and headed to Palmdale. We had everything on our list plus the M1911s. I was po’d; I wanted a Thompson submachine gun. Still we had 30 of each of the M14s and M16A3s. We had M203s on all of the M16s and enough ammo to fight the rest of the war. Each of the Hummer’s had an M240, an M2HB or Mk-19 mounted and we figured out how to load them and how the safeties worked. Of course, we only had one person per vehicle and if anyone attacked us on the way home, we were probably up The Creek without a paddle.

When we got home, we had just enough time to padlock the trailer and empty the Hummer’s. Sharon had made chili with beans and it was very welcome. So was the homemade bread. She used 2 of the Coleman ovens because we didn’t have any natural gas for the stove. Neither did we have hot water; the heater and the dryer were fueled by natural gas too. We did have water, but it clicked. I took a sponge bath; I didn’t want to get too radioactive.

“Here you go,” Ron said, smirking.

“I wondered why you brought so many cases of .45ACP. Thank you. I could kiss you.”

“Don’t you dare or you can’t have it. Do you have any idea how much that danged things weighs with a 100-round drum magazine?”

“Pushing 20 pounds?”

“I’d say.”

“How many did you find?”

“Just one. We also found some MP5-Ns”

“I wondered why you loaded up on that 9mm crap. How did John make out at the drug store?”

“He couldn’t get any Demerol, but he got Morphine Sulfate.”

“That’s even better. How many Combat Lifesaver Med kits did we get?”

“24. Why?”

“If anyone ends up getting shot, we’ll need to start an IV of Ringer’s.”

“Do you know how?”

“To start an IV? Nope, but practice makes perfect.”

“I’ll try not to be the first person who gets shot.”

“Did you find any plates for the Interceptor body armor?”

“Nope. But I found 6 100-round drums for the Thompson. I also grabbed all of the 30-round magazines I could find. How come you didn’t put gas masks on the list?”

“I guess it slipped my mind. Did you find some?”

“We found all kinds of things you didn’t have on your list. M84 Flash Bangs, Mk3 Concussive Grenades and 12-gauge breeching rounds.”

“So what are the plans for today?”

“We’ll let David and his boys unload the trailer. They can haul one of the generators to my house, Clarence’s house and their house. We can give one to Chris and Patti and one to James and Clarence Jr.”

“We can park a 500 gallon-trailer of fuel at each house and keep 2 in reserve.”

“I agree. However, I’m not so certain that Clarence wants to move back home.”

“There are 4 houses with for sale signs on them, Ron. Why don’t you ask Patti or Darlene if they’re occupied? It might be better to use all 6 generators here. That would give all of the homes in excess of 10kw of power. If you can find enough houses, it will give us safety in numbers.”

“There’s also the matter of the radiation level. We still need to stay in the shelters at night.”

“At least 12 hours a day until it gets down to 100mR. Figure on 100 days from the time the level hit 500R.”

“8 more weeks then. Other people are carving out basements under their patios.”

“It’s probably too late for that.”

“I wouldn’t be so sure, Gar-Bear. Some of them stayed in City shelters until they could come out. They’ve been working on digging since the City of Palmdale let them out of the shelters. Patti told Linda that about a half dozen people are doing something.”

“Gary, I was wondering about the possibility of putting in another 16’ wide shelter for my family.”

“You want to stay here, Clarence?”

“If we don’t have to sleep on top of each other yes. I checked with Patti and there are 5 empty 2-story homes in this housing tract.”

“There is a God. Ok, how about Ron and Linda take one, you take a second, your boys take a third and David and Lorrie take a fourth? We could put Amy and her two kids in with one of your boys in the fifth house.”

“You misunderstood. There is also an empty single-story home. Everyone can have a house to himself or herself and we can sleep under your patio until we can build shelters in our back yards, too. Now do you recommend our own shelters or expanding yours?”

“First we need to find more food, seeds, fertilizer, a rototiller and other things. Either we have to covert the appliances to propane or we need electrical appliances.”

“Let’s go to Costco,” Ron and Clarence echoed.

“Your garage is going to get pretty danged full.”

“No it won’t, you can put food in your garages, too. But before we do anything, we should hit the Big Five store and Wal-Mart. We could use some more shotguns and whatever we can get at the Wal-Mart. Maybe we can send Chris, Patti and Matt to Costco.”

“Matt will have to watch Daniel. Amy and I will go with Chris and Patti to Costco.”

“Drop the fuel trailers and grab a couple of the trailers from U-Haul on Sierra Highway.”

“I thought maybe we’d just get them from the Ryder place on Avenue R.”

“Whatever works. Be careful and take weapons with you.”

“We’re going to take James and Clarence with us for protection.”

“Then take 3 Hummer’s and pick up 3 trailers.”

◦

“Tell the Marines to retake Barstow, tomorrow. If they haven’t got what they need by to-night, tough.”

“There’s still a lot of radiation out there.”

“Don’t they have MOPP suits? Can’t they get more at Barstow? Do it Don.”

“Yes Sir. Anything else?”

“What about our Naval forces and our people we evacuated from Korea and the Middle East?”

“Our Middle Eastern forces went to Israel. The Israelis want more fighters for offering them protection.”

“Send them all of the F-14’s, they old but they still fly, right?”

“Yes. They want some F-16’s too.”

“How many?”

“All that we can spare.”

“Give them the oldest 24 that are flight worthy. That’s enough.”

“Spare parts?”

“Whatever your people tell you we can spare. I want everyone MOPPed up and helping our citizens. We need to restore power and natural gas service as soon as possible.”

“What instructions for the troops?”

“Tell them not to shoot any Republicans. They’ll be the people with guns.”

“Hey that’s not right. Some of the Democrats will have guns too.”

“Are you sure Bill?”

“No.”

“Tell the troops to use their best judgment.”

“Now the way I see the situation, we lost a lot of our hospitals. I don’t want to start relocation camps, but do we have much choice?”

“I’ve been reading Army Field manual 8-10-7. I think most of the aid we can render will come from Battalion Aid Stations. Now, if you were to center those relocation camps around BAS, we could probably do the population the most good.”

“Anyone have a better idea? NO? I knew it would come down to the military helping people. Get our people back from Israel, and find some way to move the equipment they didn’t abandon. Yes, General Myers?”

“Sir, they only abandoned supplies. The troops refused to abandon their equipment. Another thing Sir, I’m scheduled to retire from the Chairmanship.”

“General, you’re extended for the duration plus 6 months. Use whatever naval resources and Air Force resources to get all of our people and their equipment home.”

“Sir, we have 3,000+ Abrams tanks to move, 120,000+ people and all of the other systems.”

“I guess you’d better get on it General. Use all available assets. I’ll contract the UK and Australia and see if they can help.”

“Don, what did the Israelis say?”

“They want 36 F-16’s, and 12 Strike Eagles and none of the F-14’s.”

“Give them the oldest 12 F-15Es and 36 of the block 10 Falcons.”

“They want block 15, Falcons.”

“Can we spare 36?”

“We have more airplanes than pilots at the moment.”

“Tell them to start shipping the troop’s home on El Al and to bring their pilots. Give them what they want. However, give them the oldest of everything. Before you leave, we’ve decided to build evacuation camps around the Battalion Aid Stations. Make it happen.”

“What about the War on Terror?”

“I think we have enough here to go around.”

◦

“Ok, Gar-Bear, I got 3,000 gallons of propane and 50 100# tanks. A 100# tank holds about 25 gallons. We’ll still have to find some jets for the appliances. I also have one regulator per home; it was all that I could find.”

“What about the appliance jets?”

“I got those at Familian Plumbing, but they’ll take a while to install.”

“Can you get Dick to help you; he works for Southern California Gas?”

“We can do maybe 8 houses a day, tops.”

“Can you go back and refill that propane delivery truck after you’ve filled the 50 bottles?”

“That I can do, for a while at least. How many houses?”

“39.”

“And everyone probably uses gas, right?”

“The houses came with a gas range, so I’d imagine.”

“I get Dick and we’ll do what can. I can get one more delivery truck and we can store close to 6,000-gallons to refill the bottles. I don’t think that anyone will go without gas, once we convert everything.”

“What about the generators?”

“I’m not an electrician, but we can space them out around the tract and cut the electrical feeds. That will put about 6 homes on each generator. We’re actually short one generator.”

Anyone know an electrician who can figure something out?"

"I know a guy," Chris offered. "I think he will tell you not to cut the lines and just put all 6 generators up at the entrance to the tract. We can wire them in parallel."

6 60kw generators would produce 360kw of electricity. Divided by 39 homes, that meant that every home would get about 9.231kw. Divided by 120 meant about 77 amps of electricity. It would just have to do and if necessary, we could put in 2 40-amp fuses to replace the 2 50-amp fuses. With only a single cut, we could run 3 generators on either side of the two 110-volt hot lines. If they didn't like it, they could just get happy in the clothes they got mad in. In 17 years, I'd never blown one of the 50-amp fuses. Every home had a gas line on the backside of the house. We could close the natural gas valve and feed their systems from the pipe in their back yards. We couldn't run water until it quit clicking. No one could explain why the water had any radioactivity.

"BTW, did you notice the radiation level at Barstow? It was close to 350mR."

"They probably missed and hit Ft. Irwin instead. 29 Palms, MCLB and Ft. Irwin are all connected. We're going to need to adjust our schedules to allow for the extra 750mR."

"Fine, let's spot all of the generators at the front of the housing tract and cut into the lines there. Chris, can you find you friend?"

"Yep. He should have everything we need, too."

"Then within a week, we'll have electricity, gas and water, right?"

"Right?"

"Chris, how did you guys make out at Costco?"

"We got 3 trailer loads of food. The things that are going to be hard to come by, we got extra. We should make one more trip and get 3 more trailer loads today."

"What are you taking for weapons?"

"One of each of the crew served weapons."

"What didn't you get at Costco?"

"We only got canned meat; all of the fresh meat was spoiled."

"Did you check their freezers? A lot of the meat they cut comes in frozen in sub primal cuts?"

"No."

“Well, how about you get all of the freezers they have and stock them with any frozen meat they have. I’m sure they have a backup generator.”

“They did, but it ran on natural gas.”

“Forget the meat. Get the freezers anyway. They aren’t huge freezers are they?”

“They are 15.2 ft^2.”

“How many did they have?”

“I think I saw about a dozen.”

“Can we get them all?”

“It will mean an extra trip.”

“The semi is unloaded, use it and take David and his boys with you. Meanwhile, we have to figure out what to do with the mines we brought back from Barstow.”

“I can understand rifles, Gary, but what’s up with the heavy stuff?” Chris asked.

“Survival through superior firepower.”

“The government will take care of us.”

“If they’re able to and when they can. For the moment we seem to be on our own. There is a bad element here in this Valley, haven’t you noticed? All the people fled LA to get away from the gang problem and brought their gangster children with them. Remember the knifing at the High School on graduation day? 100 Hispanics attacked one black kid for no discernible reason. They have more cops on the campus than on the street these days. In that incident even the campus guard got beat up with a baseball bat.”

“Schools out.”

“Yeah, huh? So what are the gangsters doing for entertainment and something to eat?”

“Good question.”

What Will Happen – Chapter 8 – Antelope Valley

“Most of the Army Field Manuals are, were, on the Global Security website. I spent a couple of weeks copying them all to my computer’s HDD. We have the books on about everything. What we lack is experience. The latest model M18 APM, the Claymore, isn’t that hard to operate and I’ve seen demonstrations on TV, Mail Call, I think. However, the M14 and M16 APM are a little trickier, especially the M16 APM. That’s the one they call the bouncing Betty. It has an anti-tampering device that prevents you from removing it once it’s been installed. The M-14 is concussive and I think we can use them and the Claymores.”

“Why don’t you print out a manual on each of our weapon systems?”

“I already did. That’s why I needed more paper from Costco. And that reminds me. I need a replacement toner cartridge for my LaserJet. I’ll make copies of the box end and y’all can keep an eye out. We’ll be lucky if you can find one, but take all you can find.”

“It isn’t a standard cartridge?”

“30,000 pages per cartridge. I only have one spare. The fuser and things are good for about 10 cartridges. And only get a genuine Hewlett-Packard cartridge. I ruined one printer using those danged refills.”

“You’ve written stories about defending this place, have they given you any ideas, Gary?”

“First off, I think we need to keep people from coming over our fence. If we can get a load of barbed wire, we can make our own concertina. I’ve been thinking that motion detectors would be a good idea. I’m sure it would take a couple of cases of them and a lot of wire, but if we could put motion detectors on the fence, we’d have a heads up of anyone trying to come in through the concertina. After we did that, we need to post someone at the entrance that knows everyone in the housing tract.”

“Darlene or Patti can do that Gary.”

“Or Darlene’s daughter, she’s just like her mom.”

“I have the 3 radios; we could give one to whoever is on the gate, one to Patti and one to Darlene.”

“That would work. Second, we have 12 Hummer’s and each is equipped with a crew served weapon. We can station one trio on each of the 4 streets in the tract. If we need to practice, we can go a mile east on Palmdale Boulevard and have a clear shot for about 3 miles to the north.”

“Do we have enough ammo to waste it on practice?”

“If we don’t, we can ask the Army or the Marines for more.”

“Just like that? Drive up in our stolen M1114 and tell them we need more ammo?”

“Can you think of an easier way to get it? Remember, the things we have are from a supply depot, not from any active force units. We’ll eventually have to return the heavy weapons anyway when the country gets back on its feet.”

“What about fuel for those generators?”

“They’ll run on diesel, just fine. But I think we’re going to need to put in a large tank and maybe a fuel pump to supply fuel to all of them.”

“Where do we get a fuel tank?”

“They were replacing the tanks at that service station on 10th Street West when the balloon went up. Why don’t we borrow those? The new tanks were just sitting there the last time I saw.”

“Where do we put them?”

“In the backyard of the first house on the right as you enter the housing tract. If we can get a backhoe or something, we ought to bury them.”

“The wiring will be done tomorrow on the generators, you know.”

“We’d better get the tanks today then. As far as fuel goes, they have Jet Fuel A and probably JP-8 at the Palmdale Airport. It’s part of Plant 42. Ron, are any of those propane tanks at AmeriGas empty yet?”

“One is.”

“Let’s move it here and do the same thing with the propane that we did with the electricity, make it central.”

“Bad idea, Gar-Bear. The natural gas lines are lower pressure lines. But that doesn’t mean that we can’t put in a tank and transfer the propane from AmeriGas to a storage tank here.”

“Did you check that place down on Sierra Highway for more of the propane bottles? I noticed one time I was in getting my bottles filled that they had some very large bottles, maybe the 100# bottles.”

“If we can get a backhoe, that would make it easier for everyone to put in a shelter, too,” Clarence suggested.

“There is a ready-mix plant on Ave T. We could use a backhoe to dig holes, build forms and pour walls and then use a set of forms to do the lids. If we make everyone’s’ shelter the same size we’d only need a single set of forms. I know most of the lots are 65’ wide and most of the back yards are about 45’-50’ deep. What about standard 24’x 36’ shelters?”

“By the time we get all of the shelters built, the radiation level will be down to 50mR.”

“Nobody is working, what would it hurt?”

“Our plate is getting pretty full.”

“We can haul all of the tanks today, 3 diesel and 1 propane.”

“They were using a backhoe over at that construction project south of the Antelope Valley Mall.”

“I think we should leave those tanks above ground.”

“Why?”

“It’s a lot of work to dig that big of a hole.”

“They aren’t constructed as above ground tanks. We’re going to have to bury them.”

“What about…”

“Hey, improvise, adapt and overcome. I just write fiction, this is the first time I ever had to put it into practice.”

◦

The reason we still had water was because the Palmdale Water District put in a wind turbine capable of generating just under 1mw. All of their pumps and faculties were powered from that single source. The water quit clicking and when the six generators were installed, we had electricity. We also had gas for our stoves, hot water heaters and dryers once Ron or Dick installed the new jets. The radiation level continued to fall and at the 14-week mark we had a background radiation level of 50mR. Nevertheless, the shelter project continued. I even got a new shelter in my backyard and we decided that that 32’x13’ hole under the patio slab made a good storage place. 416 ft^2 of extra space was always welcome to a family of pack rats.

They got rolls of barbed wire from a feed store in Lancaster and we installed the concertina around the tract. Between Lancaster and Palmdale, there are several Radio Shacks. They supplied the motion sensors and an electrical supply house in Lancaster

supplied alarm cable. The decision was made to put everything in the house next to Chris and Patti's, now occupied by Ron and his family. The small bedroom overlooking the entrance to the tract became our command center. Read this in another story of mine? Just because I said it before doesn't mean it wasn't a good idea.

Everybody had chores. I now had a wheelchair ramp so I'd lay my Thompson on my lap and make a few circuits around the square. Chris made me a rifle rack for the back of the chair and I was toting a 590A1, an M14, an M16A3/M203 and my Winchester 94 .45 Colt rifle. I had a bag of hand grenades hanging off the right side of the seat and extra magazines in the bag on the left side of the seat.

°

"What's our status?"

"Mr. President, all of our troops are home, the Israelis have been paid off and we've set up Battalion Aid Stations wherever feasible."

"Condi, what's up with the Russians?"

"Mr. President, the Russians aren't any better or worse off than the United States and were it not for the weather, they'd be in good shape."

"What's wrong with the weather?"

"Nuclear Winter. Carl Sagan et al. were right."

"What do our surplus food stores look like?"

"We have enough to get through until next year if we don't export any food and we consider rationing."

"What about the utilities?"

"The electrical demand is down but so is our generating capacity," the Secretary of Energy reported. "As far as natural gas goes, we have a supply problem. It will be next year until we have electrical power and gas service restored, if then."

"What about petroleum?"

"Most of our refineries were located near major cities. We lost three-quarters of our refining capacity."

"I told you, George, better thee than me," Bill Clinton laughed.

“President Carter, you have worked in the third world nations around the world. What is your analysis of our present situation?”

“The United States may be a first rate military power, but under our present circumstances we aren’t much better off than a lot of the third-world countries I visited, Mr. President.”

“Health and Human Services, what is our status on disease outbreaks?”

“We are attempting to contain small outbreaks in several places around the country. We have just about any water borne disease you can name breaking out in one place or another.”

“Dirty water? What are we doing about that?”

“Most water purification occurred at municipal levels, Mr. President. Most of the major cities that were hit lost their clean water supply. They also lost a lot of their people, but those who survived immediately came up against a bad water supply.”

“Why are we still in this shelter? The radiation level has to be low enough we can get out. We need to get out and talk to people, assess needs and do what we can to fulfill those needs.”

“The needs are simple, Mr. President. The people need food, water, shelter and utilities.”

“What about security?”

“Security we’re fairly good at,” General Myer replied. “We went to the prisons and maintained the lockdowns. They don’t like MRE’s but it beats starving. We have supplemented or totally replaced local law enforcement in many communities. When we got people into the MCLB at Barstow, we discovered that the early birds helped themselves. Surprisingly, almost nobody made an all-out effort to strip the place. We’re missing HMMWVs, individual weapons, some crew served weapons, and munitions.”

“Have there been any reports of anyone using those weapons against us?”

“No Sir.”

“Let them keep them for the moment. The people who took them probably are defending their homes. What about looting?”

“There seem to be two categories of looters, Mr. President. One group only gets necessities. The other group takes anything that is not nailed down. We’ve concentrated our efforts on controlling this latter group. We had one report from California of a group of people with a semi and 3 M1114s working hard to clean out a Costco. The observer fol-

lowed them back to their housing tract and they had the beginnings of fortifications. They distributed the food among the 39 families living in the housing tract. Our observer told us that they had 12 of the M1114s, 4 each equipped with M240s, M2HBs or Mk-19's."

"Really, tell me more."

"Sir, they apparently were one of the groups that hit Barstow early. We've kept them under observation. They brought in 3 new diesel fuel tanks and are using those to fuel 6 of the 60kw TQGs. Everyone in the housing tract has electricity. They brought in a propane supply tank from AmeriGas and are supplying each home with bottle gas. That city doesn't have a water problem. They lost a fair share of their population because of the fallout from LA, but there are several housing tracts doing something to provide for their own needs."

"Where is this?"

"Do you know where Plant 42 is?"

"Palmdale. We'll I'll be danged. The Antelope Valley used to be a hotbed of survivalist groups back in the 1980's. Anything else I should know about Palmdale? It's mostly a bunch of Republicans, right?"

"Yes Sir. Not really, no. If we had to, we could take those housing tracts, but I think we'd have to use Abrams tanks."

"What about other places?"

"We're seeing similar situations all around the country."

"Are these people actually asking us for handouts?"

"No Sir. At most they've asked for medical assistance."

"Give them what they need; including munitions if they ask nicely. That will allow you to inventory government property so when this is all over we'll know where to go to pick it up."

"I don't like the idea of people running around with Assault Rifles and Crew Served Weapons," Clinton advised.

"You never did, Bill. I let the Assault Weapons ban expire, remember?"

"Why do civilians need Assault Weapons?" Hillary asked.

"Ask General Myers, he'll explain it to you, again."

°

“Do you see that reflection over in the field across the road?”

“Yep. What is it?”

“I think we’re being observed.”

“Let’s take a Hummer and go ask them what they want.”

“Unit one to base. I’m being approached by one of those Hummer’s”

“Stand up and show yourself. It’s the best way I know of for you keeping from getting shot.”

“Yes sir.”

“Look there, two fellas are standing up.”

“Looks like a sniper team.”

“Our .50 caliber is bigger than theirs.”

“Help you Sergeant?”

“We were only observing, sir.”

“Want to get a better look?”

“That’s not necessary sir.”

“How about a cup of coffee, then?”

“Get it from Costco?”

“As a matter of fact, we did. Come on, partner, we don’t bite if you don’t.”

“Who is the lady driving the Hummer?”

“The lady is my daughter Brenda.”

“I didn’t mean anything by it sir, the Corporal responded.

“The hell you didn’t Corporal. Not too bad on the eyes, is she?”

“Who is on the machine gun?”

“That’s her brother John.”

“Figures.”

“You want the coffee or not?”

“I guess so.”

“Let me see your military ID. You could be bad guys dressed up like soldiers.”

“Here you go.”

“Ok, let’s go get the coffee. You’re probably under orders to inventory the government property we took, right?”

“Yes, sir.”

“We have a list by model and serial number.”

“Is it a complete list?”

“Do I look like I just fell off a turnip truck? No, but it’s the generators, Hummer’s and crew served weapons.”

“Orders came down yesterday from the Chain of Command. We’re instructed to get an inventory of the government property and ask you if you need assistance, but not to attempt to seize the property.”

“Really?”

“Apparently the National Command Authority has issued instructions.”

◦

The term National Command Authority (NCA) is used in US military and government circles to refer to the ultimate lawful source of military orders. Though the term is singular, it in reality refers to the President (POTUS) of the United States and the Secretary of Defense (SECDEF).

Only the NCA can order the use of nuclear weapons, including the Single Integrated Operational Plan (SIOP). Neither individual, by himself, can order that strategic nuclear weapons be used against any country or region.

If the NCA determines that a nuclear strike is necessary, they must jointly inform the Chairman of the Joint Chiefs of Staff, who in turn will direct a general officer on duty in the National Military Command Center (NMCC) at the Pentagon to execute the SIOP. The use of the term dates from the Cold War era in which the United States and Soviet Union had nuclear missiles on constant alert and a responsible official had to be available to authorize a retaliatory strike within a matter of minutes. Detailed Continuity of Government plans provided for monitoring the whereabouts of certain key government officials who would become the National Command Authority if the President were himself victim of an enemy.

I am relatively certain that any instructions the NCA issued pertained to everyone in the country in a similar circumstance. In a time after a nuclear war, we will see pockets of people surviving. We are especially likely to see people in rural areas that have the means to protect themselves. This means that a lot of people in the tornado belt should survive provided they've had any kind of warning. In terms of using nuclear weapons, a country will probably try to get the most bang for their buck, e.g., they will attack key military installations and large cities.

I didn't assume that they didn't try to hit Barstow; I just assumed that they missed. It wouldn't be the first time anyone ever entered an incorrect coordinate. Barstow and MCLB Albany, GA are indeed likely targets. So are any military locations with large numbers of troops or key strategic facilities. An Army travels on its logistics. KPMD (Palmdale Airport) has fuel but it is not available without arrangements with the Plant Office. 82% of the traffic at KPMD is military traffic. Avgas is unavailable as they only have jet fuel. Thus if you ran out of fuel and declared an emergency and they let you land in your Cessna, you'd have to wait while they trucked in fuel. It's ok; the security people would keep you occupied asking questions. The security at Plant 42 is pretty strict. Sharon worked there for a while.

°

"Why did you bring them here?" I asked.

"They needed to pick up a copy of our government weapons inventory."

"Is that a Thompson submachine gun?"

"Yep. And it's mine."

"How come it says USMC on it?"

"Must have been the former owner."

"Do you have enough magazines and ammo for it?"

"What is this, 20 questions?"

“We can get you some more of the 100-round drums and more of the .45ACP, if you want.”

“What’s the catch?”

“No catch, the NCA said to supply munitions if people needed them.”

“How about a couple of these submachine guns for my buddies?”

“Sorry sir, magazines and ammo only. What are your buddies using?”

“MP5-Ns.”

“Do you need more magazines or ammo, fellas?”

“You can never have too much ammo.”

“Do you fellas have any of the Raufoss ammo for the Mk15 of yours?”

“Need some?”

“Couldn’t find any.”

“Where did you look?”

“Around.”

“Around where?”

“Here and there.”

“They had it at MCLB Barstow.”

“You don’t say. Where exactly is that?”

“The place where you got the generators.”

“I thought the name of that place was Yermo.”

What Will Happen – Chapter 9 – California

“Yermo is where you took the generators and the HMMWVs. The place you took the weapons was Nebo.”

“We couldn’t find any Raufoss ammo.”

“How much do you want?”

“You’re the sniper, you tell me.”

“How many Mk15s, do you have? I only need to know so I can supply ammunition and magazines.”

“Four.”

“M14s? M16s?”

“30 of each.”

“With or without?”

“With.”

“Do you need 40mm grenades or anything else?”

“No, Sergeant. Are you sure you’re supposed to supply us this stuff? I think it is a trick to get us to give up our weapons. We got some of those M16 mines you can take back with you. Those things are just too flippin’ dangerous to use.”

“We were hoping we’d find them before anyone set them.”

“It’s your lucky day.”

∘

A couple of comments concerning paralleling generators and the angle between the vectors at the instant of closure.

Let’s take a system that is operating at 13,200 volts and it is desired to bring another generator on line with the existing unit. As mentioned by several others, the incoming machine should be running at a slightly higher speed and a slightly higher terminal voltage than the machine, which is on the bus. The higher speed is indicated by the synchroscope rotating in the fast direction and the voltage is indicated on their respective meters. Two posts have indicated different closure angles.

The higher speed of the incoming speed is desired because the incoming machine will immediately assume some of the bus Kw load. The slightly higher incoming voltage will cause this machine to assume some of the KVAR bus loading.

Let's assume you have a bus voltage of 1 per unit voltage (13,200 volts) and the incoming machine has a voltage of 1.02 per unit (13,464 volts). If the paralleling circuit breaker is closed when the closure angle is 10 degrees, the voltage across the breaker contacts is .1772 per unit. When the closure angle is 45 degrees, the voltage across the circuit breaker contacts is .773 per unit-a very large value. Converting this information into actual voltages for a system operating at 13,200 volts phase-to-phase results in the following voltages on this system.

10 degrees closure. The line to neutral voltage is 1,350 volts across the breaker contacts.

45 degrees closure. The line to neutral voltage is 5,891 volts across the breaker contacts.

The instant the breaker contacts are closed the voltage difference must instantaneously become zero. This is accomplished by a rapid change of vars between the generators. This change of vars should be controlled to avoid upsets on the electrical system. The smaller the closing angle, the less the effects on the system. The voltage across the breaker contacts can be determined by using the law of cosines. It can be seen that the voltage across the breaker contacts is a function of the cosine of angle between the two vectors. It can be demonstrated that the closing angle has much more impact on the voltage across the contacts than the magnitudes of the incoming and bus voltages.

In summary the smaller the angle of closure, the less the effects on the system. I only discussed the effects on the systems voltages and there is another part of the story and that is the mechanical effects associated by large closure angles. The mechanical shock is also proportional to the closing angle and the smaller the angle, the less the shock. If the closure angle is excessively large and the prime movers are steam turbines, you had better have spare thrust bearings available and an alternate source of power.

One other note concerning power flow into a machine. Power flow into a generator can create a serious condition for the prime mover (steam and diesel) but generally this is only a concern when the steam rack or fuel rack is in a closed position. A closed steam rack deprives the turbine from the cooling effects of the steam and the unit tries to act as an air pump, which will overheat the turbine blading and causes distortion. In a diesel unit there is a risk that some unburned fuel remains in the diesel and this creates an explosion hazard. To prevent these conditions for extended periods of time (~ > 10 seconds), a directional power relay is installed on each unit capable of being operated in parallel. Some refer to this device as an anti-motoring relay.

That's why we had a journeyman electrician bring the generators on line. He had the tools and knowledge; we had nothing of the sort. I may have been trained to be an electronics technician back in 1961-62, but it is just as important to understand what you don't know. I didn't know that they actually made devices to synchronize generators but the electrician did. I am grateful that someone brought this to my attention.

◦

"I think that Corporal had the hots for Brenda."

"I'm positive he did. Maybe we will get a little something extra in the Christmas stocking this year."

"Don't count your chickens before the eggs hatch, Gary," Clarence responded.

"Why not, we can charge it to the quantity variance?"

"Huh?" (Cost Accounting)

"We gave them back the M16 APMs. That ought to make them happy. How much ammo do you think they will give us?"

"Enough. Look I'm more interested in getting more magazines. We didn't find nearly enough."

"We probably just looked in the wrong place, like we did for the Raufoss ammo."

"Why didn't anyone to think to ask for plates for our Interceptor body armor?"

"You were in charge of asking for stuff. I was keeping an eye on Brenda. I think she thought the Corporal was cute."

"What is the weight limit on your wheelchair?"

"300#, why?"

"I was wondering if you won't load it down when they bring more of the 100-round drums."

"I'll manage somehow."

◦

Given today's war-on-terrorism rhetoric, it's no surprise that patriotism dominates US political discussions. Some of the more controversial parts of the USA PATRIOT Act are up for renewal, and the House of Representatives, after questioning a handful of its pro-

visions, has approved the document. The debate on the merits of the act invariably has focused on the keen divide between the value of civil liberties and the imperatives of national security. Liberals worry about the Orwellian nature of the USA PATRIOT Act, while conservatives stress the necessary sacrifices in personal freedom required in the age of terrorism.

But something vital has been lost in this debate – namely, the disturbingly limited way in which many public officials define patriotism. Exactly when and how did patriotic feeling get defined in such reactive, negative terms? Since when does being patriotic require not so much a commitment to positive ideals and actions but, rather, to gestures that encourage an atmosphere of fearful watchfulness, xenophobia and the surrender of our freedoms?

Defenders of the USA PATRIOT Act insist that patriotism entails giving up some individual privacy to guard against the possibility of a terrorist attack from within or without. But patriotism also concerns a love of privacy and free speech and, not least important, a spirited willingness to defend those ideals.

Patriotism consists of multiple, positive actions on behalf of the United States – registering voters, working in an AIDS hospice, volunteering at a disadvantaged school or raising questions about the Bush administration's full-throttle militarism. Almost no one today discusses the idea of national service that would require young people of different ethnicities and economic backgrounds to come together for community projects, not military ones. The most disturbing aspect of the New Patriotism is its suggestion that dissent about the war in Iraq – or even a simple questioning of progress there – is unpatriotic.

Patriotism was not always so jingoistically defined. As the Princeton political scientist Maurizio Viroli argues in "For Love of Country," it was once a positive public virtue. According to the civic republican tradition (a tradition that includes thinkers as diverse as Machiavelli and Rousseau), patriotism was love not so much of country but of its republican forms and their traditions.

In Viroli's account, the good patriot makes sacrifices, works hard to preserve republican values and participates in civic life. This version of patriotism emphasizes positive freedom – our ability to act on our own behalf for the sake of the freedom of the republic – as opposed to negative liberty – passively allowing the state to protect us and in the process rob us of our liberties. The patriot works aggressively to defend the freedoms that make a people a republic.

The specter of a passive citizenry surrendering its rights is sadly pertinent – as is the danger of not distinguishing between patriotism and nationalism. Patriotism, in the tradition outlined by Viroli, is an activist, participatory ideal. By contrast, nationalism is largely symbolic, and at its worst mere spectacle. (Witness the attempt by Congress to draft a constitutional amendment criminalizing flag burning.)

American historians remind us of those more enlightened moments in our history when patriotic feeling entailed a range of populist causes. Gordon S. Wood and Bernard Bailyn have separately documented the ways in which the Founding Fathers drew on classical republican ideals as they forged the ideology of a new nation.

Michael Kazin distinguished between patriotic sentiment and nationalistic passion. In "The Populist Persuasion," he wrote, "[In the] late 1930s, under the aegis of the New Deal, institutional patriotism was flourishing: the opening of the Jefferson Memorial and the National Archives (displaying immaculately preserved copies of the Constitution and the Declaration of Independence) and WPA's sponsorship of historic guides and murals all connoted a sunny view of the American prospect."

We should reflect on these earlier traditions in American history. Although appeals to patriotism are almost always used for repressive purposes, a patriotic position should not be simply grounded in a citizen's reflexive acceptance of fear and surveillance. It is also an active involvement in civic life.

There is always a negative side to patriotism in wartime. But in the climate created by the various "wars" in which the United States is involved today, there is no positive side – no higher task or mission is offered to people for which they can make real sacrifices. Other than spy on our neighbors and wrap oneself in the flag, our government asks little from its citizenry (it even is letting its citizen's pay less in taxes and declines to establish a military draft).

Generating a culture of nervous suspicion, the USA PATRIOT Act outlandishly distorts an American tradition of patriotic thinking and action.

°

"France is intent on offering the world unforgettable Olympic and Paralympic Games," Chirac told the delegates. "The heart of Paris and the heart of France are beating in unison in the hope of becoming Olympic host in 2012.

"You can put your trust and faith in France, you can trust the French, you can trust us."

To do what? Surrender, again? You heard? The 2012 games will be in London; New York is claiming that the grapes were probably sour.

°

A new Pentagon strategy for securing the US homeland calls for expanded US military activity not only in the air and sea – where the armed forces have historically guarded approaches to the country – but also on the ground and in other less traditional, potentially more problematic areas such as intelligence sharing with civilian law enforcement.

The strategy is outlined in a 40-page document, approved last month that marks the Pentagon's first attempt since the attacks of Sept. 11, 2001, to present a comprehensive plan for defending the US homeland.

The document argues that a more "active, layered" defense is needed and says that US forces must be ready to deal not just with a single terrorist strike but also with "multiple, simultaneous" attacks involving mass casualties.

The document does not ask for new legal authority to use military forces on US soil, but it raises the likelihood that US combat troops will take action in the event that civilian and National Guard forces are overwhelmed. At the same time, the document stresses that primary responsibility for domestic security continues to rest with civilian agencies.

Legal barriers to sending the armed forces into US streets have existed for more than a century under the Posse Comitatus Act. Enacted in 1878, the law was prompted by the perceived misuse of federal troops after the Civil War to supervise elections in the former Confederate states. Over the years, the law has come to reflect a more general reluctance to involve the military in domestic law enforcement, although its provisions have been amended from time to time to allow some exceptions, including a military role in putting down insurrections, in assisting in drug interdiction work, and in providing equipment, training and advice.

And you thought my stories were pure fiction…

I'm not particularly smart, but I learned to read at an early age. Just about everything you wanted to know is somewhere on the Internet. You have to look. And when you don't find the answer, you have to change the question slightly. Eventually you'll find what you're looking for. Many of my storylines come from the Washington Times. I have several sources that I get 75% of my data from. I saw an M16, once, in 1964, when we were at the firing range qualifying with our .30 caliber carbines. I'm a retired researcher, that's all a tax auditor really is, you know. Our noses are 8' long. The purpose of these stories is to give you ideas so that when TSHTF – as it most surely will – you have alternatives. You really ought to get that fruit cellar finished, you know, it might come in handy. Remember, 16" of dirt cuts the radiation by 90%. 48" of dirt cuts it by a factor of 1,000 and 5' of dirt cuts it by a factor of 10,000.

What will the world be like after a nuclear war? Carl Sagan was more or less right. So you southern folks might want to have one set of northern heirloom seeds. Would Ron, Clarence and I go to Barstow? We would if it still were there. The CEP of the Chinese missiles is only 1,000 meters. They have some new ones, too. Most of their bombs are 3mT bombs and they have 2 sizes of warheads, 2mT and 5mT. In order for China to buy Unocal, they have to get it through a committee. That committee has only refused one deal since it was formed in 1987. However, the POTUS has the final word, and you know George. Chevron will probably end up owing Unocal.

Ask yourself what the United States would be like after the ‘Chinese’ lobbed maybe 150 of their 400 weapons to our side of the pond. Derek and I visited late last night and they will hit our ports, other key military installations and most of our 100 largest cities. The population of the 100 largest cities in the United States totals 50 million. Draw a line with a radius of 250 miles around all of those 100 cities and see what left. How many ports do our Navy use, half a dozen? How many Army and Marine Corps installations would they need to hit to wipe out a significant portion of our military?

The US can immediately answer any attack with up to and exceeding 3,688 nuclear warheads. We have 14×24 Trident D missiles, currently, each with 8 warheads. We have 50 Peacekeeper missiles with 10 warheads each and 500 Minuteman III missiles with from 1-3 warheads. Russia pulled out of Start II when the US pulled out of the ABM Treaty. Therefore, did we really de-MIRV the 500 Minuteman III missiles? Maybe and maybe not, I don’t know. Donald wouldn’t take my call, LOL. Our 4 SSGNs will carry 22 tubes carrying 7 Tomahawks each (154 total) and four torpedo tubes. The US has 320 TLAM-N warheads. 154×4 = 616, so if they have any TLAM-Ns, it may only be a few. Damon called and said that they have nuclear mines on the S-3 Vikings.

“The W80, designed by Los Alamos, is deployed in air-launched and sea-launched cruise missiles. Approximately 350 nuclear SLCMs were produced, and all remain in storage. NRDC estimates that a total of 400 W80s are currently deployed to arm ACMs. NRDC also estimates that the W80-1 stockpile includes a total of 1,400 warheads remain in stockpile associated with the 900 ALCMs that are in storage with their warheads removed. The surface launched Tomahawk Land Attack Missile-Nuclear (TLAM-N) weapon system on board a ship includes a BGM-109A-l cruise missile with a W80-0 nuclear warhead; deck mounted armored box launchers, a weapon control system, and a mission planning system.”

3,688 + 400 = 4,088. Or, if our Minuteman IIIs are all MIRV’d, we have 2,688 + 400 + 500 + 1,500 = 5,088 active warheads. That’s not counting the bombs. We have 21 B-2 Spirits and a total of 94 B-52’s. There are 92 B-1Bs in service (2 are test beds) that could be converted back to nuclear bombers. A B-2 carries 16 nuclear weapons and a B-52 carries 20 ALCMs or 8 nuclear bombs. If push came to shove would George hesitate using nuclear weapons? Would Don Rumsfeld? Don is a given, and I think under the right circumstances, George could be persuaded. My son, the Sergeant, agrees that it is a question of when, not if.

°

“Ten magazines total, huh? You can fight the war all by yourself.”

“Ronald McDonald, it isn’t worth a crap over 50 yards. But I have all of the other weapons on my rifle rack.”

“I asked and they didn’t have any plates for the body armor.”

“I still can’t get over them letting us keep our weapons.”

“I wouldn’t get too attached to them.”

“Yeah, Gary, they’re going to take them away one of these days.”

“Well, they have to find them first.”

“What do you mean?”

“My storage room that we all used as a shelter is now connected only to my shelter and there is no independent entrance. Even if I told you where the entrance was, you would never find it.”

“They’ll find it with ground penetrating radar.”

“No they won’t.”

“You’re awfully cocky.”

“Maybe, go find it. You spent 14 weeks in the place.”

Ron and Clarence hadn’t been in my backyard in a very long time. The support pillars and joints we put in couldn’t stand the weight of all of the concrete and dirt and had started groaning. We moved the dirt onto the lawn and added more top cover to that little 24’×36’ shelter I had. After, I had the patio cover detached from the house and lain on the lawn. Next we took out the concrete and excavated close to the house. They put in a heavy wall to support the house footings and 3 layers of the ¾” steel plate were added on the top, supported by proper beams this time. Finally, we’d laid a foot of concrete over the top, reattached the patio cover and moved the excavated dirt back on top of the patio. Chris constructed a blast door for me that was 6 layers of ¾ steel, each layer inset like a bank vault. That dang door weighed a couple of tons and it connected the tunnel from the lawn shelter to the space beneath my patio. The new patio shelter was 13’ wide and 60’ long, not counting the 14’10’ (net) Ell. 780 + 140 = 920 ft². I had put 4’×8’ sheets of plywood up against the house and filled them with the excavated dirt about 4’ deep. My protection factor was 1,000 from the dirt, a little over a tenth value for the foot of concrete and just under a tenth value for the steel, e.g., it was about 100,000.

We had to close off the kitchen and bedroom patio doors to do it, but we still have a front door and the exit through the garage. Because we had previously painted our stucco, it was easy to match the paint. I had 4 gallons left over from when they painted and everything matched. The down side to having patio sliders is all of the dirt that blows in, but that problem was solved, forever.

“Whoa, you covered the entire patio with dirt. Why?”

“Why not?”

“So, what are we supposed to find?”

“The entrance to my new shelter.”

“You probably connected a tunnel to it from the shelter in your lawn.”

“Did I? Go look.”

“Where in the hell did you find the Onan generator?”

“Around. I got the fuel and water tanks from another service station that was replacing their tanks. There are 18,000-gallons of diesel and 18,000-gallons of water.”

“And it looks to me like you have all of the walls filled with shelves that hold spare parts.”

“That’s right, partner. Anything worth doing is worth doing right.”

“Ugh, the shelves won’t move.”

“They’re bolted to the walls, Clarence.”

“I can’t see any place here where you could have a tunnel going under your patio.”

“Find it, I promise you there is an entrance somewhere.”

“Maybe it is outside, Ron.”

“We’ll look Clarence.”

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“All right, I give up, where is the entrance?”

“I forget. I could tell you, but then I’d have to kill you.” (Thanks)

“Quit clowning around.”

“Go back to the shelter.”

“Now what?”

“Put on these blindfolds and stand over there. I’ll open it up and guide you through one at a time.”

“Second childhood, Gar-Bear?”

“Humor me.”

When they got the blindfolds on, I inserted the crank and unscrewed the blast door, allowing one of the shelves to hinge out. I opened the door and led them into the new shelter one at a time. I closed the blast door and told them to take off their masks.

“Nice, big sucker.”

“It’s 13’ wide and 60’ long. Down on the east end is the Ell that goes under the solid patio cover. I’m using that as my armory and commo shack.”

“Where did you get the bunk beds?”

“Eddie’s airplane patch.”

“How did you do that?”

“They abandoned the place. So, I got some bunk beds and mattresses and put a bunch in.”

“Who helped you do all of this?”

“Chris.”

“How do we get out of here?”

“Down that tunnel and turn the wheel on the blast door.”

“The shelf is attached to the door?”

“Right, that’s why there isn’t anything heavy on it.”

“This is what we needed when the Chinese attacked.”

“When that happened, I would have had to pay for everything. But waiting until now, I got it all for free. It will come in pretty handy, you know.”

“What for? Who else has nuclear weapons that would attack the US?”

“Nobody that I know of, unless it would be the Russians. But, I think that George Bush and Vladimir Putin are pals, so I don’t expect anyone else to attack us. However, like I always said in my stories, bad things come in three’s. Anyone heard anything about Yel-

lowstone or the Long Valley Caldera lately? Clarence have you been keeping an eye on the sky?”

“I ain’t seen nothing.”

“Bzzz, double negative. Does that mean you have seen something?”

“I haven’t seen anything.”

“It’s either the volcanoes, the calderas or the earthquake faults, Ron.”

What Will Happen – Chapter 10 – The United States

Those who cannot remember the past are condemned to repeat it. – George Santayana

Heard it before? It's still true! On August 6, 1945, a United States B-29 bomber dropped Little Boy on Hiroshima, 17.5kt. 66,000 people were killed instantly. 69,000 more were injured and 30,000 of those died shortly thereafter. On August 9, 1945, a United States B-29 bomber dropped Fat Man on Nagasaki (20kt). 39,000 people were killed instantly. 25,000 more were injured. As far as I'm concerned, tough noogies, who attacked whom? If we had invaded Japan, it is estimated that ½ million Americans and 2 million Japanese would have died. 90% of the medical personnel in both cities died.

Before Truman ordered the bombs dropped, the Allies at Potsdam gave the Japan an ultimatum and demanded unconditional surrender. The Japanese arrogantly ignored the Potsdam Declaration. Oops. From that day until WW III another nuclear weapon was never dropped, except in a test and even testing was banned. The Japanese had their chance and didn't take it. The United States prepared one Little Boy U-235 bomb casing and 6 Fat Man Plutonium bomb casings. Between Russia declaring war on Japan and the two bombings, Japan surrendered – if they hadn't, what then? I guess we'll never know, will we?

I indicated that the Chinese only used maybe 250 weapons against the US in this attack and implied they used the other 150 on Russia. What if they had more? What if they were more prepared than we gave them credit for? They wouldn't want to invade America anyway. Everything the Chinese needed is in southeastern Asia. The Chinese are capable of huge building projects, like the 3 Gorges Dam. What's to say they didn't build a lot of shelters to protect their military? Bush would do the logical thing and bring our entire military force home to help the country dig out of the mess it found itself in. Remember one thing else. The US has already faced the Chinese in one war, the Korean War. They kicked our butt because MacArthur let his supply lines get too thin and they attacked in the winter. We turned right around and kicked their butt when Mao made the same mistake as MacArthur. The Korean War ended in a draw because Truman wouldn't use nukes on China. Whether you liked or disliked MacArthur, he was an arrogant prick and put George Patton to shame. He thought he was the Emperor of the Philippines and later Japan. He wanted to use 50 nukes on the Chinese during the Korean War. It was probably his fault China even got involved in the Korean War because he went to the Yalu River.

After WW III, neither Russia nor the US would be in any condition to do anything except launch more missiles at the Chinese or possibly at each other. Logically, the President would suspend Posse Comitatus and use the military to restore order. It would represent his primary resource and it wouldn't really matter which party was in office. There would be groups that would hit the armories and depots first and worry about food later. I have always assumed and will continue to assume that it will happen and always sooner than later. Maybe my thinking is that since the government didn't protect us, I want my tax dollars back.

Considering the Johnny-come-lately modifications I made to my shelters, they'd play hell using ground-penetrating radar. The military might get their Hummers and generators back, but that's about all. We probably wouldn't quit scavenging until we found generators and everything else everyone needed. Hell, I might even stock my new shelter with new re-allocated appliances, electric of course. Then we could be good citizens and return the HMMWVs and generators. We would no doubt lie about the weapons. For the remainder of the story, I'm assuming that the Chinese survived as well as the Russians and Americans. For the sake of argument, I'll put the total loss of life at 50% in each of the 3 countries. That would leave the US with 150 million people, Russia with 71 million people and the Chinese with 653 million people. With a country quadruple the population of the US, China would have free rein in southeastern Asia. At 150 million, our population was about equal to the 1950 census.

And even if India and Pakistan managed to avoid a war, they would never be sure that China had used all of its nuclear weapons. BTW, Damon said that under full power, a Carrier threw up a rooster tail higher than the flight deck and it wouldn't surprise him if the Nimitz Carriers, the Ticonderoga GM cruisers and the Arleigh Burke class GM destroyers couldn't do 40 knots too. His ship was AOR-6, the *USS Kalamazoo* and it was decommissioned in 1996. They were doing 22 knots on his ship under full power, until they broke an engine, which they fixed and went right back to 22 knots. In the meantime, they did 13 knots on a single engine. They were part of the Kennedy task group. I do know that some of the aircraft require a minimum of 30 knots blowing over the flight deck to launch, it's on Global Security. I also believe that once a President ever saw the effects of a nuclear war up close and personal, he'd change the ground rules.

It takes a carrier a minimum of 50 minutes just to clear the pier so you'd better bet that if a war looked likely, all of the ships would be out of the harbor. As soon as our last Nimitz carrier is commissioned, all of our carrier force will be nuclear powered. I expect that under a situation with rising tensions all of the ships would be kept fueled and their stores maintained at near sailing levels. The Kalamazoo carried 7 million gallons of petroleum products, food and weapons stores. The Ticonderoga, Burke and Spruance class ships all use gas turbine engines. All of the AORs have been decommissioned and replaced by the newer AOEs, which are rated at 25 knots. The AOEs carry 6.5 million gallons of fuel, 500 55-gallon drums of lubricants, 800 gallons of bottle gas, 1,800 tons of ordnance, 400 tons of food and 20,000 gallons of transferable water.

Social Security agreed that Damon was Certifiable and put him on full disability. He dropped one of his veteran's claims and is pursuing the other. If he succeeds, he'll draw more disability than his tired old father. BTW, he sold his Harley. He is now living in Britt, IA, Derek is living in Gassville, AR and I live in my 'office'. I mostly gave up on TV. When I get it loud enough to hear it, everyone else gets mad. I'd watch it in the daytime, but just when I get interested in something, Montel or Oprah comes on.

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Four terrorists are getting more media coverage than the entire German Air Force did during the Blitz. British troops streamed to the capital, took up position outside Buckingham Palace. Foreign embassies, including the Israeli mission, were evacuated. London hospitals overflowed with blast victims. In what appears to be the first major break in the London terrorist attacks, US authorities tell ABC News that British police have recovered two unexploded bombs in London. The Italians need geography lessons: "What has happened is the tragic confirmation that terrorism strikes once more at the heart of Europe," said Italian Franco Frattini, Europe's commissioner for justice and home affairs.

In the space of four bombs, the memory of success in Singapore seemed impossibly far away in a parallel reality. On Wednesday Trafalgar Square was thronged and riotous; last night workers streamed across it in watchful, somber silence. Charles Dickens once lived in the house alongside where the bus was bombed yesterday morning. What would the great writer have made of this atrocity, the cruel horror of the best of times, immediately followed by the worst of times? *It was the season of Light, it was the season of Darkness,* Dickens wrote in A Tale of Two Cities. *It was the spring of hope, it was the winter of despair.*

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We condemn utterly these barbaric attacks. – G8 statement

They have such evil in their heart that they will take the lives of innocent folks. The war on terrorism is on. – President Bush

The great nations of the world must unite to fight terrorism. – President Chirac

The coordinated action, carried out in a way that was as cowardly as it was perfidious, clearly was also aimed at the summit taking place at the same time. – Gerhard Schröder, the German Chancellor

It is a terrible attack on innocent people, but it has to be said again that free people must not yield to terrorism and we will not. – John Howard, the Australian Prime Minister

What has happened is terrible, and I express my deepest feelings of condolences. – Junichiro Koizumi, Prime Minister of Japan

Spain has suffered during decades the blight of terrorism and on March 11 of last year was the victim of the most horrific attack registered until then in Europe. Because of this, Spaniards well know the suffering the British nation is going through today. – José Luis Rodríguez Zapatero, Prime Minister of Spain

What happened today again testifies to the fact that all of us are doing too little to unite our forces effectively in the struggle against terrorism. – President Putin of Russia

I am telling my Arab brothers that terrorism today in Iraq will tomorrow affect other Arab countries, as has happened in Yemen and Saudi Arabia. – President Talabani of Iraq

These terrible events have brought home to us the full evil that terrorism represents. It is not the weapon of the weak against the strong but the rage of the angry against the defenseless and innocent. It is an evil means to an evil end. – Sir Jonathan Sacks, Chief Rabbi

As it happens I have spent this morning with Muslim colleagues and friends here in West Yorkshire and we're all as one in our condemnation of this evil and in our shared sense of care and compassion of those affected in whatever way. – Archbishop of Canterbury, Dr. Rowan William

While he deplores these barbaric acts against humanity, he asks you to convey to the families of the injured his spiritual closeness at this time of grief. Upon the people of Great Britain he invites the consolation that only God can give in such circumstances. – The Pope in a message to Cardinal Cormac Murphy-O'Connor, head of the Catholic Church in England and Wales

It was encouraging to hear the Prime Minister saying that we will stand united in our resolve to ensure that terrorism will never win. One of the most shameful fallouts of terrorism is that it aims to divide communities by creating fear and suspicion. – Ramesh Kallidai, Secretary General of the Hindu Forum of Britain

We do not want people to divide communities because they are either angry or afraid. We are all caught up in this together irrespective of our religions. – Dr. Muhammad Abdul Bari, chairman of the East London Mosque

Yet again we are witnessing barbaric attacks against completely innocent people by unscrupulous terrorists. These terrorists are using fear and horror as a means of exerting political pressure. – Anders Fogh Rasmussen, the Danish Prime Minister

I am deeply saddened to hear of the appalling attacks this morning in London. I know I speak on behalf of all NATO allies when I express our sympathy for and solidarity with the British people. There can be no justification for such heinous crimes. – Jaap de Hoop Scheffer, NATO Secretary General

Israel, which has a long experience of terrorism, shares in the pain of the British people caused by these terrible attacks. – Silvan Shalom', Israeli Foreign Minister

Deeply saddened by the news of the terrorist attacks in Central London, the Holy Father offers fervent prayers for the victims and for all those who mourn. – Statement by the Pope

We offer our heartfelt sympathies to those who suffered due to such acts. – Sheikh Rashid, Pakistan Information Minister

We are all Londoners at this moment. – Bertrand Delanoë, Mayor of Paris

Deepest solidarity and friendship and support for the British people. – Dominique de Villepin, Prime Minister of France

I'm deeply saddened that this should happen at the heart of an Olympic city. Unfortunately there is no safe haven. – Jacques Rogge, International Olympic Committee President

Does everyone get it now? How many more things are going to need to be blown up and how many more people killed before everyone agrees that there is a War on Terror?

The bombs may have been intended to derail the summit, but an agreement on climate change that satisfies the widely differing positions of France and the US appears to have been clinched last night. Weeks of tough talks produced a deal that President Chirac said had met five key French conditions. Earlier in the day President Bush had signaled his support for what he called "a better way forward" on climate change.

The recent arrest of an al Qaeda terrorist in Pakistan provided some clues that terrorists were planning attacks on trains and buses, but there were no specific warnings of the bombings in London yesterday, US officials said. The lack of a specific warning highlights continuing US intelligence shortcomings in spying on al Qaeda and related Islamist groups, which are suspected in the attacks. *I'm not aware of any specific intelligence that suggested this was going to take place,* Homeland Security Secretary Michael Chertoff told reporters after the bombings.

Forget about all of the dying there was a breaking news story in: NASHVILLE, Tenn. – A couple pleaded guilty Thursday to hiring a stripper for their son's 16th birthday party and were sentenced to two years' probation. Landon and Anette Pharris, who were charged with contributing the delinquency of a minor, also were ordered to take parenting classes. The parents hired the stripper to perform at a September party attended by about a dozen young people. "We even had grandpa there," she said. Hey, no one invited me!

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When it appeared that we weren't going to be attacked by the MZB's, the Army showed up and wanted their M1114s and crew served weapons. I told them we gave the weapons to the other bunch of soldiers who were by earlier. I figured it would take them a couple of years to figure out I was lying and who knows, I might be dead by then. They wanted to see the paperwork the other soldiers gave me and I said they didn't give us any. Weren't those the people we were supposed to give the weapons to? Anyway, they must have figured I was lying and they searched all 39 houses, the sheds and the 39 backyard basement shelters. I don't think they believed me but they couldn't prove oth-

erwise. I also told them that I was po'd because the other soldiers made us give up all of the individual weapons and ammunition. At least we got to keep the generators until Edison had the power back on, in a year or so.

"How come we aren't running propane to the houses from a central source?" Dick inquired.

"Someone said the natural gas pipe wasn't strong enough."

"Horse hockey, it is standard black gas pipe. Even the 2-foot earthquake loop is rated at 350 psi. We'll need to add a vaporizer and we can install the 2nd regulators on all of the homes. It's not a big deal, Gary."

"Ron, where do we get a vaporizer and the low pressure valves for the homes?"

"AmeriGas."

"I can put in a valve to switch back to natural gas if they ever get it restored," Dick offered.

"But you have to remove all of the regulators, won't you?"

"Only the secondary regulators, a couple of days, tops. Quicker if we have help."

"Fine, let's do that. Now what about a pair of backup generators for the tract when the Army takes back their generators?"

"We will need about 470,000kw of prime power. The right Cummins model is the DFGB."

"We need 2, a primary and a backup."

"We'll need a control panel too that will automatically switch from one generator to the other and to Edison if their electricity is available."

"Why should we risk our necks when we're getting by with the military generators?"

"We still needed the Hummers and the crew served weapons, but they came after them anyway. We'd better plan on them picking up the TQGs before we're done with them."

"LA?"

"Check the Business-to-Business Yellow Pages, Ron."

Later…

“I found 2 places, but I don’t know if either place has that particular model, Gar-Bear.”

“It can’t hurt to look, can it?”

“That’s what I’m really afraid of. We might get killed and not even find a generator, let alone 2 identical models.”

“Look again for a company that rents mobile Industrial Generators.”

“I have them on my list already.”

“We’ll need two good pickups with trailer hitches.”

“There aren’t any in the tract.”

“Let’s go to the Palmdale Auto Mall and get two. We can bring them back here and fuel them up. Afterwards we’ll try the places you found in LA.”

“Won’t LA be pretty hot?”

“Radioactive? Probably, but we can wear our dosimeters and not stay very long. Which place on your list was the biggest?”

“It was in Monterey Park. Planning on starting there?”

“Yep and work our way down until we have two.”

We found everything we needed in Monterey Park. They had 4 and we picked the best 2. They were Cummins DFGB rated at 545kw prime. Only 7 tons each! We were in and out in an hour. We put them in the back yard where the tanks were buried and wired them up. One would be the primary until it needed servicing and then we’d switch to the other. We’d service the one we shut down and keep it as the standby until the other needed service. When all was ready, we started one, got it running smoothly and cut over, eliminating several problems all at once. We disconnected the Army’s generators and slid them into the street for the Army to pick up. The observers must still be there somewhere, the Army showed up 3 hours later with a lowboy and a forklift. They loaded the generators, we told them thanks and headed to AmeriGas to borrow the vaporizer and the regulators we needed. We had the gas service back up and running the next day. The generators of that size have built-in controllers that handle everything, including synchronization.

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The rental place in Monterey Park had a lot of generators. We talked it over and decided it wouldn’t hurt to get 39 more generators, all capable of 100 amps at 240v, e.g., at least 30kw. I kept reminding Ron and Clarence that trouble came in threes and they

said it might be better safe than sorry. There was nothing wrong with being redundant. We took a semi to Monterey Park and loaded up on generators and parts. We also got manual transfer switches. These were all diesel-powered units.

Things were coming together, but it was nothing like anything I'd ever imagined in my stories, before. Still, it was just a variation on a theme. In the 17 years we'd lived in Moon Shadows, the population had probably turned over a couple of times. It seemed that out of the original 39 families there probably weren't more than a half dozen left. The tract had started out as a blue-collar neighborhood with a single black family, an oriental family, a Hispanic family and 36 redneck families. Now the housing tract was a typical cross-section of California. We had 2 black families, 2 oriental families, 20 Hispanic families, usually 2-4 to a house, and 6 blue-collar redneck families. The other families were mostly white liberals. However, there were usually up to 6 empty houses in the tract at any given time, while our Hispanic friends moved from one barrio to another.

The large generator was a real fuel hog, 40.3gph at full load. Compared to the amount of diesel 39 separate generators would use, it was a bargain.

"Are we giving every house a generator?"

"We most certainly are, partner. However, it will be up to the people to find their own fuel and wire them in."

"That's not very neighborly, Gary," Clarence complained.

"I'm not feeling neighborly today."

"Obviously. What's next on your agenda?"

"Putting in patios for all of our families and a separate generator shelter for Chris and Patti plus Dick."

"By patios do you mean bigger shelters?"

"That's right partner. When the world ends, I want us to all be comfortable."

"The world already ended, Gar-Bear."

"It couldn't have, I'm still alive and so are the two of you. I haven't heard from either of my boys, but they're out there somewhere trying to get to here. I expect that Jennifer and Paula are doing the same, right?"

"Probably, yes."

"Then were going to need places for them aren't we?"

“Are there 4 more empty houses?”

“I have no idea, but if there aren’t, we have a temporary problem, don’t we?”

“Sounds permanent to me.”

“Only until we persuade them that there are a bunch of nicer empty homes on the west side. We can let them take the smaller generators and go back to Monterey Park and get some more of the larger units. While I’m thinking of it, I saw a station down that way that was replacing their fuel tanks. They had 6 new tanks sitting there waiting to be installed. That will give you each a pair of tanks and give Chris and Dick a pair they can share.”

“If we do build those patios, we can get by with one per family, can’t we? That would mean we’d only need to build 2 more patio shelters and a little shelter to house Dick and Chris’s water and generator.”

“Are we going to divide up the crew served weapons?”

“After we get the tract finished off, I suppose we’d better.”

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Six months later, we hadn’t seen hide or hair of our kids, but we did have Moon Shadows all fixed up for the next disaster. We planted gardens in the backyards of the houses that weren’t undergoing a construction project and we almost ran out of canning supplies. The word somehow leaked out about all of the large empty houses on the west side and we slowly lost our neighbors. After they left, we replaced the generators they took with them with larger units. We were scavenging a little here, a little there and had used up Palmdale and had started in on Acton. We filled all of the fuel tanks with diesel and stabilized it with PRI-D. Fuel was starting to get to be hard to find. But we found a truck stop on I-5 and got all we could carry.

The tanks were Xerxes Corp. single wall fiberglass tanks and had an actual capacity of 20k gallons. They were 10’ in diameter and about 38’ long. My back yard shelter was 60’ long, 13’ wide and 8’ high so they wouldn’t fit. Ron and Clarence had to make their shelters longer. We went to Anaheim and found the Xerxes Corp manufacturing plant and got them 8’ diameter, 15k gallon tanks. The Cummins generators for the shelters were model DGBC 60hertz models that had a prime power rating of 32kw and used from 1.2gph of fuel at ¼ load to 2.9gph at full load. Our best guess was that we’d probably run them at about ½ load and use about 1.8gph. That means that I had almost 11,111 hours of runtime in my single tank of fuel. There are 8,766 hours in a year (365.25 days). Ron and Clarence had the same generators but only 15k gallons giving each only 8,333 hours.

Since Chris and Dick needed to build a new place for their tanks, they used the 18,000-gallon tanks. The extra 4 tanks were buried in the back yard of the second house in the housing tract and hooked into the tanks that fed to two main ½ mw generators.

“If we get an earthquake, I’m afraid those tanks may pull off their cradles and break loose from everything.”

“Any suggestions?”

“Yeah, pour walls so they have nowhere to go.”

“That’s easy for you, your tank is against the wall and you separated them with a wall. Mine aren’t.”

“We’ll empty your two tanks and move them to the south wall and butt them against each other. Then we can pour a wall to hold the pair in place. We can also slide them back so the ends are against the west wall of the shelter. You can put your generator on the other side of the support wall.”

It was quite the undertaking, but when we were done, none of the tanks were going anywhere. We were building our food reserves, too and everyone that was a member of our little clique had enough for at least 2 years, maybe more.

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You had to give the President credit, he did things the way that they should have been done and 2 years after the attacks by the Chinese, everything was back to *normal* and we had natural gas and electricity. We weren’t fooled by the appearance of normalcy either. Bad things always happen in threes. Eventually, all of the kids showed up, to visit at least, and we worked hard on getting them to stay. Damon was easy, we gave Kathy and him a house and he got a U-Haul truck to go back to Britt for their things. Derek and Mary wanted to return to Gassville, but when I offered them a house and showed him all of my play pretties in the shelter, they decided to stay, for a while they said. Ron didn’t have any problem with Ronnie Joe and Jennifer, but Mark and Paula wanted to return to Austin. Paula said it was nice not having earthquakes.

What Will Happen – Chapter 11 – The World

Here is a short chronology of some major attacks in Europe in the last 30 years.

October-November 1974 – Wave of IRA bombs in British pubs kills 28 people and wounds more than 200.

August 1980 – A bomb planted by rightwing extremists at Bologna railway station in Italy kills 85 and injures at least 200.

October 1984 – Prime Minister Margaret Thatcher's cabinet escapes IRA bomb, which kills five people at hotel in British resort of Brighton.

April 1985 – Eighteen die and 82 injured in Madrid bombing claimed by Shi'ite Muslim extremists.

December 1988 – A Pan-American Boeing 747 crashes on the town of Lockerbie, Scotland, killing all 259 aboard after a bomb on board explodes. Eleven people in Lockerbie are also killed.

April 1992 – IRA car bomb explosion near the Baltic Exchange international shipping market in London's financial district. Three people are killed and 91 injured.

July 1995 – Gas-canister bomb explodes on rush-hour underground train at crowded Saint-Michel Metro station in Paris, killing eight and injuring 86, in an attack blamed on Algerian Muslim extremists.

February 1996 – IRA bomb rocks London's Docklands area, killing two and injuring 100.

August 1998 – Car bomb blast in Omagh, Northern Ireland, kills 29 in worst single attack in nearly 30 years of violence. The Real IRA splinter group claims responsibility.

September 1999 – Bomb destroys Moscow apartment block, killing 94 and injuring more than 200.

September 1999 – Bomb destroys eight-story Moscow apartment block, killing 118. Officials' blame both it and the September 9 bomb on Chechen guerrillas and tighten security in the capital.

October 1999 – More than 110 are killed and about 400 are injured in a rocket attack on a crowded market in the Chechen capital Grozny. Russia denies any part in the attack.

September 11, 2001 – Four passenger jets hijacked. One crashes into North Tower of World Trade Center. Second crashes into South Tower of World Trade Center. Third crashes into Pentagon. Fourth crashes into a field in Pennsylvania after passengers rush the cockpit.

November 2003 – Four blasts rock Istanbul, killing 61 people and injuring at least 400. The blasts devastate both the HSBC Bank headquarters and British consulate, killing the British consul Roger Short. Two synagogues were also hit.

March 2004 – 191 people are killed and more than 1,800 people wounded in simultaneous bomb explosions in packed rush hour trains in three Madrid stations.

July 2005 – Four explosions rip through London's underground rail system and buses, killing more than 50 people. The previously unknown "Secret Group of al Qaeda's Jihad in Europe" claimed responsibility shortly after the blasts.

I wonder how much Israel would charge us to end the War on Terror? We could provide the neutron bombs. We most certainly have enough, even if we don't admit it.

The Moscow Treaty was signed at Moscow on May 24, 2002, and entered into force on June 1, 2003. The Moscow Treaty both reflects and significantly contributes to the emergence of the new strategic relationship between the United States and Russia. The Treaty places upon the United States a legal obligation to implement fully its publicly announced plans to reduce to a level of 1700-2200 strategic nuclear warheads by December 31, 2012.

The US plans for achieving by December 31, 2012, the strategic offensive reductions required by Article I of the Treaty involve, as the first planned step in reducing US operationally deployed strategic nuclear warheads,

• Retiring 50 Peacekeeper ICBMs,
• Removing four Trident submarines from strategic service, and
• No longer maintaining the ability to return the B-1B heavy bomber to nuclear service.

These steps are already underway (Peacekeeper deactivation and SSBN-to-SSGN modification) or completed (B-1B). At any given time, the United States will have two of the remaining 14 Trident SSBNs in overhaul. Those SSBNs in overhaul will not contain operationally deployed strategic nuclear warheads. What did I tell you about those B-1B bombers, huh? I don't believe that they can't be converted back, either. According to Global Security, the US doesn't have any neutron bombs or nuclear mines, either.

I can just imagine the conversation:

"What do you want?"

"All of the Islamic terrorists gone."

"So, who doesn't?"

"How about you take care of that for us?"

“What’s in it for us besides the scorn of the World?”

“We’ll provide the neutron bombs and add something to sweeten the pot.”

“Like what?”

“F-22 Raptors.”

“We’d need 30 Raptors, 96 Abrams M1A2SEP tanks and the bombs before we’d even consider it.”

“Anything else?”

“How do we know the neutron bombs work? Have you tested them?”

“Not really, no, but the previous models worked just fine.”

“Since you have no guarantee that they work, we’ll have to have extras.”

“How many extras?”

“Say 1 for 1.”

“The B-61 is a proven bomb. I don’t think you’ll need any extras.”

“Still… That’s the deal, 60 bombs and 60 backups. We keep the backups if the original bombs work.”

“Gee, I don’t know.”

“You asked, we didn’t. We’ll have to have the Raptors up front and we’ll use them to make the attacks.”

“They don’t carry nuclear weapons.”

“They can each carry 2 1,000-pound JDAMs, sure they can. You’ll have to add the equipment to the fighters to make them activate the bombs with the PAL codes. And of course, we’ll need the codes for those 120 bombs.”

“Do you use PAL codes on your bombs?”

“Israel doesn’t have nuclear weapons.”

“So the price of ending the War on Terror is about $7.5 billion worth of airplanes, $384 million worth of tanks and 120 nuclear weapons?”

“Call it $8 billion, how much have you spent so far?”

“I see what you mean.”

◦

“I don’t have any problem with the deal. What I’m concerned about is plausible deniability.”

“We’ll just have to be the first ones to suggest that the Israelis did it, Mr. President. We’ll sell the planes and tanks to Israel and then when no one is looking, refund their money. We can scrap the weapons in conformance with the Moscow Treaty.”

“What about the electronics?”

“We can take them from the retired Eagles.”

“I can’t authorize this you know.”

“I’ll take the heat, no one likes me anyway,” Don replied.

And, just like that the War on Terror ended. The only Arab country spared was Egypt. I hope I’m not dreaming, but if I am, it isn’t a nightmare.

◦

“Whoa, did you feel that?”

“About a 7, I’d say. It wasn’t as bad as the Whittier Narrows quake, however.”

“The generators are coming on for the housing tract, we must have lost electricity.”

◦

It was at 7:42 a.m. on October 1, 1987, that a strong earthquake measuring M5.8 rocked the East Los Angeles region. The Whittier Narrows earthquake shook the region quite hard, registering shaking intensities of VIII on the Modified Mercalli intensity scale (a relative shaking intensity scale from 1-12 shown in Roman Numerals).

The temblor was centered between Whittier and Montebello along the west-northwest trending Whittier fault zone and was felt as far away as Las Vegas. No surface fault ruptures were ever discovered. Eight people were killed and many were injured.

The quake damaged more than 10,400 buildings and the total cost of property damage exceeded $350 million. Felt aftershocks lasted for months and micro-earthquakes were recorded for years.

The quake underscored to engineers, planners, and policy makers that even events registering less than M6 can cause significant damage, and even death, if they centered in densely populated areas.

°

“There it goes again, hang on to something.”

“That one was stronger and lasted longer, partner.”

“What month is it?”

“October, why?”

“Bad earthquake month. We’d better get out of the house and into the backyard.”

“Gary, what the hell is going on?”

“Just a minute, Clarence and I’ll polish my crystal ball.”

“Oh crap, here we go again.”

For the next 200+ seconds, the 3 of us were treated to a rollercoaster ride without the benefit of needing to travel to an amusement park. My patio cover detached from the house and collapsed. Then, the house began to quiver and it partly collapsed. When the shaking stopped, we went looking for our families. The women were in the front yards, having bolted out the front doors.

A precursor isn’t much of a warning. Usually, a precursor precedes an earthquake by an hour or less. In this case it was a matter of minutes. Streetlights were down all over the housing tract as were many of the homes. We had no idea of the intensity of the quake on any scale, but it was most definitely *The Big One*. Once we were assured that our families were ok; we each went to check our shelters. That new wall they talked me into putting in had held both tanks in place. I had thought them foolish before, but the thought was passing rapidly. Before I could get the door to the patio shelter all of the way open, the first aftershock hit. I needed a drink. I finished turning the crank and rolled the door open to the shelter. I went in to see if everything was ok in the patio bomb shelter. Anything that wasn’t attached was turned over, but nothing was broken. I opened the commo room and checked there, too. Everything in there was fine, the room was supposed to be everything proof. I strapped on my Vaquero, grabbed my black cowboy hat and headed back to the surface.

“Anything that wasn’t attached tipped over, but nothing was hurt in the shelter.”

“Didn’t you bolt down your table?”

“Nope, it didn’t break, it just tipped over.”

“I see smoke.”

“Something must be burning if you see smoke, Ron.”

“Did your crystal ball tell you that?”

“It can’t talk.”

“Hu’s on first.”

“He survived the missile attack?”

George: Condi! Nice to see you. What’s happening?

Condi: Sir, I have the report here about the new leader of China.

George: Great. Lay it on me.

Condi: Hu is the new leader of China.

George: That’s what I want to know.

Condi: That’s what I’m telling you.

George: That’s what I’m asking you. Who is the new leader of China?

Condi: Yes.

George: I mean the fellow’s name.

Condi: Hu.

George: The guy in China.

Condi: Hu.

George: The new leader of China.

Condi: Hu.

George: The main man in China!

Condi: Hu is leading China.

George: Now whaddya' asking me for?

Condi: I'm telling you, Hu is leading China.

George: Well, I'm asking you. Who is leading China?

Condi: That's the man's name.

George: That's who's name?

Condi: Yes.

George: Will you, or will you not, tell me the name of the new leader of China?

Condi: Yes, sir.

George: Yassir? Yassir Arafat is in China? I thought he's dead in the Middle East.

Condi: That's correct.

George: Then who is in China?

Condi: Yes, sir.

George: Yassir is in China?

Condi: No, sir.

George: Then who is?

Condi: Yes, sir.

George: Yassir?

Condi: No, sir.

George: Look Condi. I need to know the name of the new leader of China. Get me the Secretary General of the UN on the phone.

Condi: Kofi?

George: No, thanks.

Condi: You want Kofi?

George: No.

Condi: You don't want Kofi.

George: No. But now that you mention it, I could use a glass of milk. And then get me the UN.

Condi: Yes, sir.

George: Not Yassir! The guy at the UN.

Condi: Kofi?

George: Milk! Will you please make the call?

Condi: And call who?

George: Who is the guy at the UN?

Condi: Hu is the guy in China.

George: Will you stay out of China!

Condi: Yes, sir.

George: And stay out of the Middle East! Just get me the guy at the UN.

Condi: Kofi.

George: All right! With cream and two sugars. Now get on the phone.

Some things are worth repeating…

°

Ron and Clarence hadn't moved back to their houses because the power had only been restored days before. Mark and Paula had left an hour before the first precursor hit. Their plan had been to drive to Victorville and visit with a friend of Paula's before they got on I-15 and headed to Salt Lake City to pick up I-80. They weren't that far away and overpasses had collapsed in Victorville. They came back, but had to bypass the viaduct on Highway 18. All of the overpasses in the Victorville area had either collapsed or were

in danger of doing so. That probably also meant that I-15 south of the Cajon Pass was blocked.

The aftershocks were worse than some earthquakes. We strung a wire to have a dipole antenna for an am radio to try and get a clear channel radio station from the east. I tried to raise some one on one of the ham bands, but didn't have any success. Finally, I got po'd and told Damon to stay on the radio until he talked to someone, anyone. He gave up after an hour, too. With the tract's generators we had electricity but getting the gas going wasn't going to happen, too many houses were down. Dick said we couldn't be certain that the gas pipes were intact until he could run a pressure check and he didn't have the necessary equipment to do even that.

We carefully removed what we could from the houses and gave up a lot sooner than we planned. The houses in Moon Shadows had all been engineered to withstand an M8.0 earthquake. Obviously whatever we had had been far stronger. That evening we picked up an Arizona radio station talking about the M_w 8.9 earthquake in California. Now we knew. The largest aftershock was reported to be about an M_w 7.1. They registered shaking intensities of XI-XII on the Modified Mercalli intensity scale. A 300km section of the San Andreas Fault beginning in the Inland Empire and extending to beyond Ft. Tejon was involved.

"Highway 14 will be closed; there are over 16 overpasses between Palmdale and the Valley."

"Sierra Highway should be open; I don't think there are any overpasses on it to the north."

"It will be closed to the south though. They're going to play hell getting help into Palmdale."

"No they aren't."

"What not, Gar-Bear?"

"We have Plant 42, Lancaster has Fox Airport and Mojave has a huge airport. Besides, the biggest airport runway in the United States is the Rogers dry lake at Edwards, de-spite claims to the contrary. This place is going to be crawling with troops wanting to rescue us before the dust totally settles."

"What are we going to do?"

"We can get them to check out our gas lines and repair them. Then, they can demolish the houses that are down and inspect the others. Did either you or Clarence go to check on your houses?"

"Mine is totally demolished, Gary."

“Ours didn’t completely collapse, but they’ll have to tear it down.

“What are you going to do?”

“I’m going to take the insurance settlement and not rebuild.”

“Clarence?”

“What?”

“What are you going to do?”

“I’m going to get out a Mk15 rifle and wait for Geraldo to show up. It’s up to Shirley what she wants to do about the house, but it’s way too close to the Fault to suit me.”

“Do you know what we ought to do?” Ron asked.

“No, but I’m sure you’re going to tell us, right?”

“We ought to pack up all of our stuff and move to Cedar Hill.”

“Think about that partner. We have a good setup here. We’d need a fleet of semis and another fleet of tankers just to move our fuel and the tanks. We could pull one of those ½ mw generators and take it with us, but we’d have to empty every tank into a tanker and dismantle the shelters to get out those tanks. Among us, we have 50,000-gallons of diesel fuel and 4 more tanks holding a total of 72,000-gallons. That would take 8 tankers to move the fuel. We’d also need a couple of semis to move what’s left of our household goods. How would we replace all of the tanks?”

“We could take the 8 18,000-gallon tanks and leave our tanks. All of our fuel would fit on one or two railcars. The same thing goes for the tank we took from AmeriGas. We could ship the propane by rail and only move the tanks. We can get another vaporizer and enough valves for our families at AmeriGas. Then, we could leave most everything here. We’d take our small generators and one large generator. In the end, we come out ahead with 144,000-gallons of diesel storage as opposed to what we have now. The AmeriGas propane tank holds 30,000-gallons. We’ll use the insurance settlement money to buy new triple-wide mobile homes in New Mexico.”

“What about personal transportation?”

“Well, how about getting some more diesel pickups at the Auto Mall before the Army get here? Lyn and I can get Robert and Johnnie Rae to get us 10 acres or so in the Cedar Hill area and we can all relocate there.”

“Sharon is ready to get out of California, I can tell you that much.”

“How much will the lot rent be Ron?”

“I’ll add together the property taxes, insurance and 20% of the cost of the improvements and divide it up by the number of lots. It will be what it will be. Once the improvements are paid for, we’ll lower the rent.”

What Will Happen – Chapter 12 – Cedar Hill

It took an hour to get everyone a new pickup, a little while longer to get U-Haul trailers and we went looking for a used propane rail car and diesel tanker railcar. It would take only 2 rail flatcars to move the propane tank and the 8 diesel fuel tanks. If fuel had been more available, we'd have sold it and bought more in Cedar Hill. Robert advised against that, so we transported it by rail. All of the other goods could fit inside of 2 boxcars. It turned out that neither Chris nor Dick wanted to move so it would just be our three families. Ron called Robert on their 'private' radio channel and Robert said he'd handle his end. Rather than construct 11 separate shelters in New Mexico, Ron suggested that we just construct one mammoth shelter with the 1' slab on top and set our new triple-wides all in a row.

Between the 3 of us we got enough money in our insurance settlements to buy the 11 necessary homes. When we had all of our ducks in a row, we hired the necessary rail cars, moved the fuel, propane, tanks and all of the other things by rail. They made it to Cedar Hill before we did. Robert and Jonnie Rae had lined up the homes and had them at the dealer's ready to be picked up. Ron got them excavating the massive basement and had a well drilled. Yes, Robert had managed to acquire the water rights, no mean feat in New Mexico and Colorado.

As soon as the basement was finished – floors and walls – we had the contractor set the large generator, the small generators and the deep freezes and other appliances in the basement. He then poured the enormous 1' thick slab and covered it with 10' of compacted earth. That was topped with 6" of concrete that we intended to set our homes on. We planned to use the slabs between the houses for our garage floors. We ended up settling on doublewides because even with a volume discount, none of us had enough money to do everything at once. We also settled for a gravel road and gravel driveways, but we got the whole thing done before we were broke. Barely.

The basement was 40' wide, inside, and there was enough room to put the 8 fuel tanks across one outside end, 4 wide and 2 high. The 30,000-gallon propane tank ran across the other shelter end and we had a well so we didn't need to store water. We did anyway, you understand. We waited until we had enough money and got all of the 3-car garages built at once. Everyone was very happy to be out of the People's Republic.

°

After the garages were built, our next major project was to fence the 10 acres. A fencing contractor was hired to drive the posts and he had a machine that let him put in the steel posts in a single day, for the entire 10 acres. We decided on a strand of barbed wire topped by 24" of pig wire and 3 strands of barbed wire on top. We did the lower stand of barbed wire and started on the pig wire, which was attached to the corner post and unrolled. Then we used a tractor to stretch it tight and attached it to the steel posts. We did the barbed wire a roll at a time and guesstimated it would take about a week to have the 10 acres fenced in. Cedar Hill, New Mexico doesn't really have jobs; it's a res-

idential area. The nearest work was in Durango, CO and Aztec, NM. Most of the area just across the border is the Southern Ute Reservation.

Why move, you might ask? Why not? Every aftershock caused something else to collapse; we took our insurance money and ran. If we had stayed in Palmdale, sooner or later the MZB's would have shown up and we would have had to defend the housing tract. Besides, we still had one more disaster to go and we wanted to be away from people when whatever happened, happened. Yellowstone was on my short list.

°

The shelter was absolutely huge. It was long and narrow, 40' wide on the inside and 1,100' long. Think about that. A quarter mile is 440 yards or 1,320'. We only had one entrance, right in the middle on the backside of the homes. It was a ramp so I could roll down it with my wheelchair. When you've built enough shelters, you eventually get your priorities straight. Ron and Clarence were on Medicare and enough of the system was restored that they got wheelchairs too. Since Derek was a certified Combat Lifesaver, it only made sense to run him through an EMT-1 course. He said there wasn't a lot of difference in the training, so with the prerequisite out of the way, I signed him up for Paramedic training. Having medical supplies and knowing how to use them correctly are two different things.

It had been about two years between the two disasters we'd experienced. The new President was now having the Army and National Guard retrieve all of the weapons people had taken from the depots and armories. First, they had to find us and second they had to find the weapons. You all know how much I like my *secret panels*, right? Try and find these guns! We put some calves and pigs in the field to fatten. We had to feed them; they'd have starved on the grass in that field. When the hogs got big enough to butcher, we kept the females for breeding stock and butchered the barrows. We had pork chops running out of our ears and Emeril Lagasse would have been very happy with all of the pork fat.

The downside to having livestock is that you have to care for them. That means having someplace for them to stay in the winter and someplace to store hay and feed. Have you ever priced livestock feed? You need to buy cattle feed and hay. Now hogs will eat most anything but when you don't have most anything, you have to buy it. Meat costs the same; the only difference is in how you pay for it. Real farmers convert their grains to protein by growing livestock. If the price of beef is high and the price of grain low, that makes sense. Sometimes it's the other way around and it doesn't. And that forces the prices of beef and pork higher and farmers start producing more meat. They call it the law of Supply and Demand. 10 out of 9 farmers are usually on the wrong part of the curve, if you ask them.

We had the biggest garden you ever saw. And we had the younger generations to do all of the work. Veggies aren't much of a bargain the first year, especially if you have to buy jars, rings and lids. After, you only need to buy lids; the jars and rings don't wear out.

Plus if you're selective at the grocery store, certain brands of food come in mason jars. Spaghetti sauce is a prime example. You save the jars and the following year, you make your own homemade spaghetti sauce. Once the jars are sealed, you can usually remove the rings and use them on the next batch of jars. Thus the only thing you need to buy is a lid.

There are and always will remain certain things that you can't have too much of. Toilet paper and ammunition come immediately to mind. And here is where Emeril and I take issue. Fresh spices are nice, but you try and grow chili powder in the middle of winter. Feminine hygiene products can serve their original purpose and double as battle dressings, in a pinch. They can also be used for hot packs; I seem to recall telling you how I learned about that.

Flour doesn't keep well, but if it is in the form of dry pasta, that's an entirely different story. Properly stored, dry pasta will keep for a million years. So will things like rice and beans, again, if they're properly stored. Yeast is a leavening agent, but if you have some flour and a potato, you can make your own leavening agent – sourdough. Dry yeast has a shelf life of about a year. Stored in a refrigerator or freezer, it has a longer life. How long? You've got me.

The ideal way to generate a lot of *hamburger* is to buy some boneless beef and add it to the meat you harvest. Boneless beef is generally dairy cows and it contains almost no fat. If you can buy one old dairy cow and butcher it with say 4 steers, you'll use most of the meat and fat in all 4 of the steers. It sort of depends on how big the dairy cow is and how much fat is on your beef cattle. In and of itself, that old cow isn't much of a bargain for eating, but it sure makes your hamburger lean. And you need ground beef to make chili.

And since we were expecting the world to end at any moment, we stored a lot of livestock feed and hay. I bought a used meat cutting band saw so, if necessary, I could teach the others how to cut meat. Meat is cut in different ways in different parts of the United States. For instance, the tri-tip is a California phenomenon. I learned to cut meat in Iowa when I was in college. I may be a bit rusty, but in a pinch, I could still cut up a side of beef. The primary difference between chili meat and hamburger is that hamburger is ground twice. With boneless beef, you can make your hamburger into ground sirloin.

°

Garage might be a misnomer. They were 3 stalls but 40' long. It made for extra storage space. Some things didn't have to be stored in the shelter, like the extra toilet paper, for example. Hell, I was beginning to think that real life was turning into one of my later stories, *Bankrupt*. Besides, maybe we, I, were just being alarmist; it didn't appear that Yellowstone would erupt anytime soon.

We, I, hadn't counted on the pent up hostility of one group of people. The problem with eradicating cockroaches is that if you leave just one, pretty soon you have a lot. The problem with giving Israel whatever is that if they missed anybody, and the survivor listened to what news there was, pretty soon the survivor would trace the foul deed back to its origins. And, everyone knows that the Americans are lackeys of the Jews, or is it the other way around? Either way, the Israelis didn't get the F-22 Raptors from the Russians. And those tanks were the latest American models, the M1A2SEP. Only Russia, the US and possibly China had neutron bombs. You didn't have to be a rocket scientist to figure that one out. It was a good thing that the Russians weren't missing any nuclear weapons. Otherwise the terrorists would have gotten their hands on a 5mt nuclear weapon and detonated it at Yellowstone and forced the caldera to erupt. Now we're talking a real problem, 2,000km³ of radioactive discharge. Yes sir, it was sure a good thing the Russians weren't missing any nuclear weapons…

◦

"They said on the news that the Israelis bombed all of the Arab countries in the Middle East except for Egypt."

"Good, I wish they had nuked the French."

"You can't do that; the French must be someone's allies."

"They'll be our allies again, when the Germans invade."

"Yeah, but will we be theirs? I think we've paid them back enough for the Revolutionary War."

"Gar-Bear, you're a cynic."

"Ron, everyone has to be something. Want to have a wheelchair race?"

"You always win."

"That's because I cheat."

"How can you cheat? The wheelchairs come with the speeds preset."

"I read the book and found the potentiometer to adjust. It may say 5 dots, but I think I'm really getting 6 dots. It just makes the batteries run down faster is all."

"What does your crystal ball say about Yellowstone?"

"It says it will erupt when the terrorists set off their nuclear weapon."

"Don't you think you ought to warn the Department of Homeland Security, Gary?"

“Clarence, they won’t listen to me, I’m just a senile old crackpot, like Carl Sagan.”

“You have one up on Carl Sagan, you know, Gar-Bear.”

“What’s that, partner?”

“Carl Sagan is dead.”

“It’s just a question of when, not if, Ronald McDonald. We’re all going to die.”

“Not while I’m living, I’m not.”

“Right. You’re 100% right, as usual.”

“So, if Yellowstone blows, how big will it be? Will we be safe in Cedar Hill?”

“It depends. Huckleberry Ridge put out 2,450km^3 of ash, Lava Creek put out 1,000km^3 of ash and Long Valley caldera put out 580km^3 of ash. All of those covered this area. The Mesa Falls eruption only put out 280km^3 of ash and it didn’t cover this area. Mt. St. Helen’s only put out 0.4km^3 of ash and the big one they had in the Philippines only put out 4.8km^3 of ash.”

“They couldn’t just take a bomb into Yellowstone and put it anywhere could they?”

“I don’t know, but I don’t think so.”

°

Excerpt from Geotimes – June 2005:

My experiences over the past few years have necessarily caused me to reflect on the public face of science, scientific information and scientists themselves. Prior to my role at YVO, I’d worked as a full-time researcher on the geochemistry of magmas and their related hydrothermal systems. I recognized that although my research was relevant to volcanology and economic geology, it explored subjects too arcane to be of much interest to the public. My focus was toward other scientists, and when reporters did venture near my door, I was challenged to convey properly the significance of my work while keeping things simple, technically accurate and appropriately reflective of work done by others.

So it came as a bit of a shock when regardless of anything I’d actually done as a research scientist, I was now solidly in the role as the point person for a whole host of critical questions. Will it erupt? Why not? When? How do we know?

It’s been a fascinating transition – one that was not necessarily desired, but that has taught me useful lessons in communicating technical information to a public that truly cares about what scientists say and how we say it. These lessons hold true for people dealing with media in any profession, not just the earth sciences.

The first lesson is not to talk about a sensitive subject unless you’ve thought about it before, talked about it with others and gotten some feedback. Fortunately at YVO, we have three coordinating scientists with varied expertise and different home institutions, so we have natural checks and balances when we communicate to the public. We’ve learned that it’s critical to keep things as simple as possible. If you’re trying to answer a question, do not give an answer that will spark two more questions. And while there may be 10 different possible ways to answer a technical question, there’s always one that is a bit more direct and more intuitively satisfying, and that’s the one you should use.

Second, tell the truth and admit when you don’t know something. If you tell the truth as you see it, many will still call you a bald-faced liar. If you choose to hide anything, they’ll know you are one.

And last, don’t confuse enthusiasm with good outreach: It may work for high school kids but it won’t work with the New York Times or nightly news hours. When we get too casual or enthusiastic, our words come back to haunt us. Our excitement about understanding earthquakes, volcanoes, hurricanes and floods can be misinterpreted. Reporters may confuse our reconstruction of past events with a prediction of future events. Ultimately, the latter holds their interest.

In the end, the reporters and filmmakers have the final say. They write the articles and scripts, they choose the quotes and sound bites, and they have the attention of the public. When they work hard to get the facts correct, it pays off. The Supervolcano drama was successful in large part because it was authentic, making the plot more gripping and the whole experience more educational. When the science is ignored, or misunderstood, everyone loses. The challenge for us scientists is to relay both the details and the context of our work, so that society understands that science is ultimately a human endeavor – sometimes uncertain, often complex, but always exciting. There is a volcano in New Mexico, not all that far from Cedar Hill.

°

In New Mexico, Valles Caldera is ranked as a moderate risk and Carrizozo and Zuni-Bandera are ranked as very low risk volcanoes. There are 169 volcanoes in the US and its territories. Valles Caldera is southeast of Cedar Hill; it would seem that we could run, but we couldn’t hide. Still, Valles Caldera was only a moderate risk, so Cedar Hill beat the crap out of Palmdale. Cedar Hill, elevation 5,860’, was 476 miles (766 km) (414 nautical miles) on a heading of south-southeast (160.4°) from Jackson, Wyoming, elevation 6,234’. Now you see why we all had wheelchairs, we had trouble catching our breath.

All the terrorists had to do was learn from the geologists at YVO where the park was closed due to excessively high ground temperatures and put their little 5mt bomb there. Naturally the geologists or the Park Service employees were only too happy to oblige people who wanted to know where they shouldn't go. Obviously, these were conscientious immigrants who were trying to play by the rules of their adoptive country. Not. The Park Service employees kept an eye on them anyway and they only went where they were allowed to go. If only everyone were so conscientious. Lower Geyser Basin was closed. They didn't try to go there, at that time. After the Park Closed, they went there and left a rather large package, hooked up to a timer. Not enough time, as it later turned out, but they tried.

You see, bad people are always with us, no matter what we do to eliminate them. For example, we freed the Iraqi people but not all of them appreciated being freed, especially not the Sunni Muslims. Iraq then became a cause for all of the radical Muslims, many from outside Iraq. Al Qaeda is very influential among the insurgency. Remember bin Laden is a Saudi Muslim and they're radical all of the time. Before the first Gulf War, Kuwait was on the US list. It was Margaret Thatcher that got G. H. W. Bush involved in that one.

°

The sun was just rising and I was sawing logs. I didn't get to see the brief flash from almost 500 miles to the north-north west. I heard about it later.

"Walk up you old fart," Ron shook me.

"JERK!" I called him by his first name.

"Drink this coffee."

"Wait, I have to make room first."

"Now, drink this coffee."

"Why, I like to sleep to noon."

"Someone set off a bomb at Yellowstone."

"Bull that could cause the Caldera to erupt."

"It did."

"It did what, cause the Caldera to erupt?"

"Yep."

“Where’s my hat? I can’t fight terrorists without my hat.”

“Don’t you want to know about the eruption?”

“I probably will hear nothing else for the next 2 years. Do we have enough coffee and cigarettes?”

“Yes, of course. I got the kids out rounding up the livestock.”

“It would be a lot easier if we had horses.”

“We have horses.”

“When did we get those?”

“Last fall right after we got the cattle and hogs. We didn’t get chickens until this spring.”

“Any of those horses named Salina?”

“No why?”

“I guess I don’t have a horse, then.”

“Sure you do, you named her Samantha, don’t you remember?”

“Remember what?”

“Get dressed and ride down to the shelter.”

“Samantha?”

“No, your wheelchair.”

“What is my wheelchair’s name?”

“Salina.”

It gets to be pretty confusing when you get old. My wheelchair was named Salina and my horse was named Samantha. I remember now, the private nurse. An unauthorized biography! Or did I just forget, again? I won’t tell if you don’t. You’d think Carl Sagan would be getting tired of being right all of the time. Oh, that’s right, he’s dead.

“3,000km^3, Gar-Bear.”

“Cripes, they’ll be getting ash in Mexico City. We should have built a tunnel to the barn so we could take care of the livestock. I’d like to meet Samantha before she croaks.”

“We did.”

“When?”

“When we built the barn.”

“Where was I?”

“Working on the 63rd different version of *The Three Amigos* story.”

“What was it called?”

“I don’t know, after you read 2 or 3, they got to be the same thing.”

“Hey Gary, come to my room, I have a bottle of the good stuff.”

“What do you have Clarence?”

“Cranapple.”

“Sheesh, I though you meant Bombay Sapphire gin.”

“You don’t drink.”

“It’s not my fault, my body gave out.”

°

“What’s on the news?”

“The usual, terrorists set off another bomb.”

“Where?”

“Yellowstone.”

“I heard. Ron told me. Anyone hurt?”

“Don’t plan on visiting Jackson Hole anytime soon.”

“Ok. I haven’t been there for a while anyway.”

“When were you in Jackson Hole?”

“I spend a long time there in Mountain Man and I almost made it back in TEOTWAWKI II. But Yellowstone erupted and I never got there. Which is my room?”

“The one labeled A-3. Ron is A-1 and Clarence is A-2.”

Lincoln is the capitol of Nebraska and no I don’t get the joke.

“Are the wives in W-1, W-2 and W-3?”

“No they’re in B-1, B-2 and B-3.”

“Probably more appropriate, but don’t attribute it to me.”

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For Father’s Day my Wife and Daughter bought me books. One is titled Rifles and Small Arms published by Barnes and Noble has a picture of my Nazi gun on page 200. It is a Sauer und Sohn model 3811. It is almost identical to the model 38H, but one little detail gives the gun away. According to the book, “Approximately 200,000 were made during World War II, and a large number have survived.” The serial number of my pistol is 262,734. He said I could pick and that was my choice. James Bond, eat your heart out.

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We didn’t have to deal with the ash. A great big rock came out from behind the sun and smashed the earth into a jillion pieces.